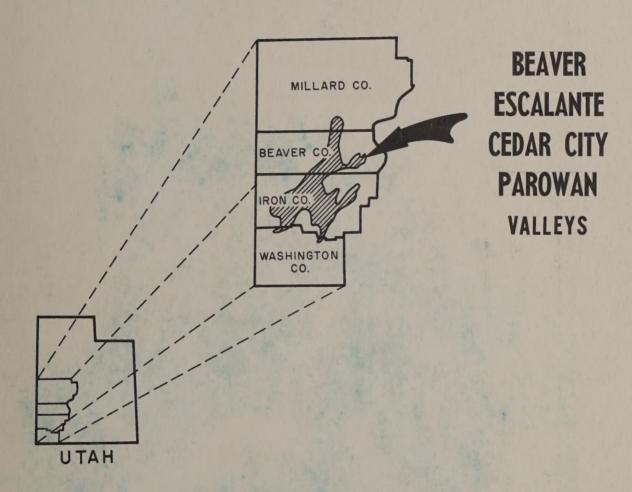


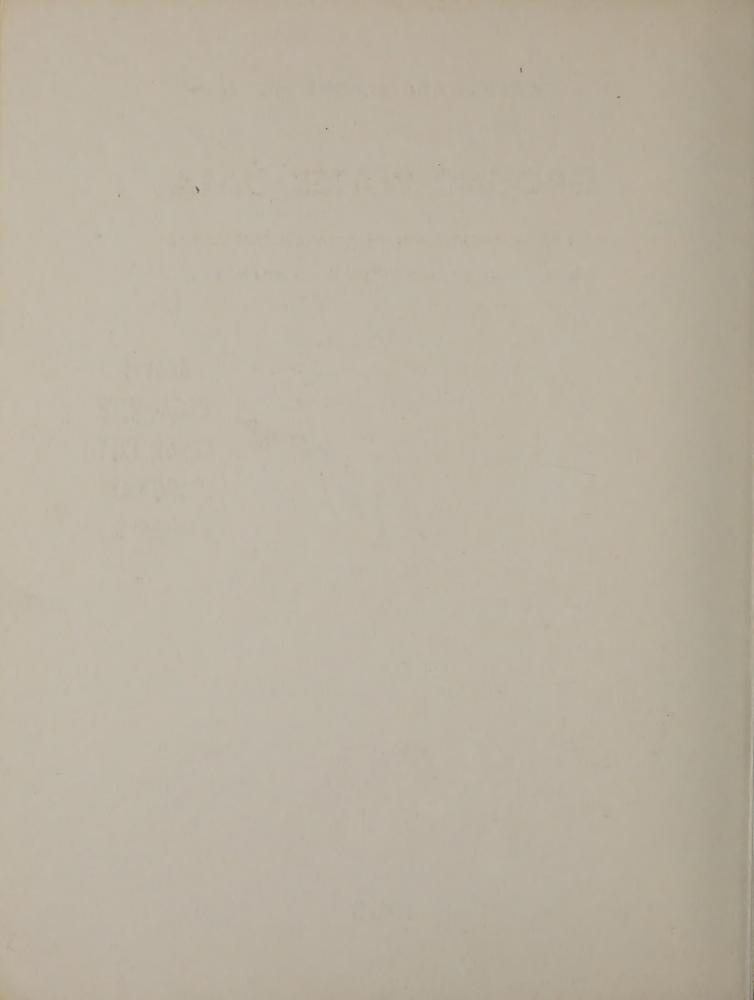
BASIC-DATA REPORT NO. 6

GROUND-WATER DATA

PARTS OF WASHINGTON, IRON, BEAVER, AND MILLARD COUNTIES

UTAH





GB 1025 .U93 100.6

BASIC-DATA REPORT NO. 6

GROUND-WATER DATA

BEAVER, ESCALANTE, CEDAR CITY, AND PAROWAN VALLEYS

PARTS OF WASHINGTON, IRON, BEAVER, AND MILLARD COUNTIES, UTAH

Ву

George W. Sandberg, Hydraulic Engineer
U.S. Geological Survey

BLM Library
Denver Federal Center
Bldg. 50, OC-521
P.O. Box 25047
Denver, CO 80225

Prepared by

The United States Geological Survey

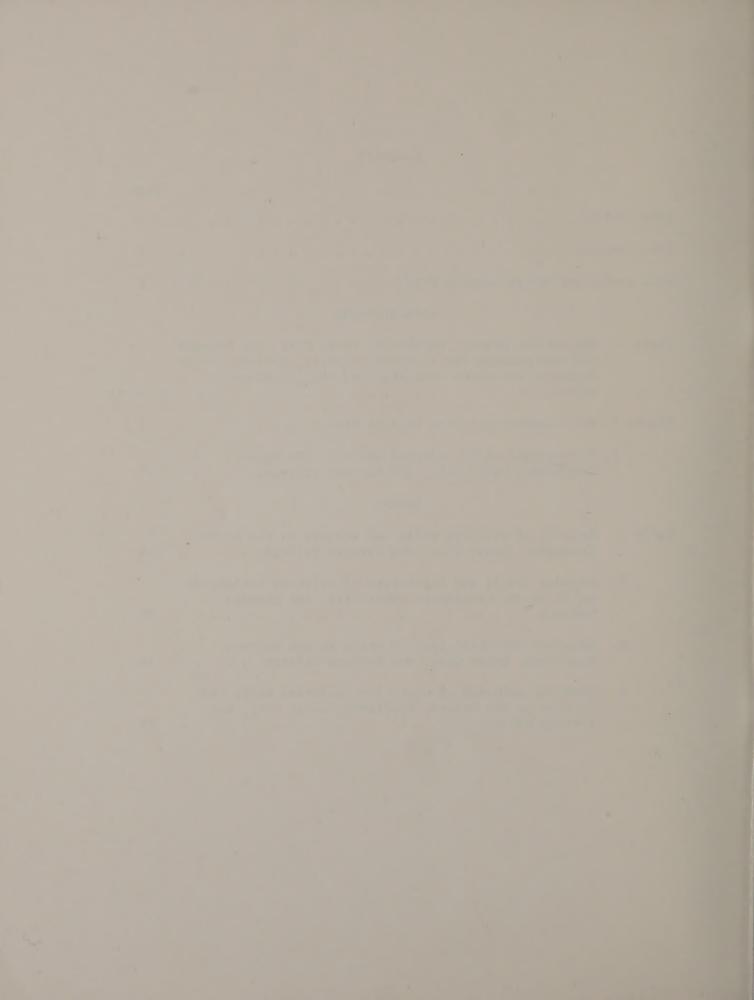
in cooperation with

The Utah State Engineer

Salt Lake City, Utah

Contents

	Page
Introduction	1
Bibliography	2
Well-numbering system used in Utah	2
Illustrations	
Plate 1. Map of the Beaver, Escalante, Cedar City, and Parowan Valleys showing the location of wells, springs, sites selected for water sampling, and the ground-water districts	
Figure 1. Well-numbering system used in Utah	3
2. Hydrographs of 30 selected wells in the Beaver, Escalante, Cedar City, and Parowan Valleys	. 22
Tables	
Table 1. Records of selected wells and springs in the Beaver, Escalante, Cedar City, and Parowan Valleys	, 4
 Pumping levels and discharges of selected irrigation wells in the Escalante, Cedar City, and Parowan Valleys	. 14
3. Selected drillers' logs of wells in the Beaver, Escalante, Cedar City, and Parowan Valleys	. 15
4. Chemical analyses of water from selected wells and springs in the Beaver, Escalante, Cedar City, and Parowan Valleys	. 19



Introduction

This report is intended to serve two purposes: (1) to make available to the public basic ground-water data useful in planning and studying development of water resources, and (2) to supplement an interpretive report that will be published later.

Records were collected during the period 1935-62 by the U.S. Geological Survey in cooperation with the Utah State Engineer as part of the investigation of ground-water conditions in the Beaver, Escalante, Cedar City, and Parowan Valleys. This report will include records collected subsequent to data published in earlier reports listed in the bibliography. The interpretive material will be published in a companion report by George W. Sandberg.

This report is most useful in predicting conditions likely to be found in areas that are being considered as well sites. The person considering the new well can spot the proposed site on plate 1 and examine the records of nearby wells as shown in the tables and figure 2. From table 1 he can note such things as diameter, depth, water level, yield, use of water, and depth to aquifers in wells in the vicinity, and from the well logs in table 3 he can note the type of material that yields water to the wells. Table 2 gives several years record of yields and pumping levels of irrigation wells, and in table 4 are the chemical analyses of water from wells and springs. Figure 2 shows the historic fluctuations and trends of water levels in the four valleys. If the reader decides from his examination that conditions are favorable, he can place an application to drill a well with the State Engineer. During the past several years, however, the State Engineer has rejected new applications to appropriate water in major portions of Beaver Valley, Milford and Beryl-Enterprise districts in Escalante Valley, and Cedar City Valley. Anyone seeking to initiate a new ground-water right in any of these areas should obtain information from the State Engineer's Office in either Salt Lake City or Cedar City to determine the likelihood of approval of the required application.

The report is also useful when planning large-scale developments of water supply. This and other uses of the report will be helped by use of the interpretive report upon its release.

Bibliography

- Connor, J. G., Mitchell, C. G., and others, 1958, A compilation of chemical quality data for ground and surface waters in Utah: Utah State Engineer Tech. Pub. 10, 276 p.
- Fix, P. F., Nelson, W. B., Lofgren, B. E., and Butler, R. G., 1950, Ground water in the Escalante Valley, Beaver, Iron, and Washington Counties, Utah - A progress report: Utah State Engineer Tech. Pub. 6, in Utah State Engineer 27th Bienn. Rept., p. 109-210.
- Thomas, H. E., Nelson, W. B., Lofgren, B. E., and Butler, R. G., 1952, Status of development of selected ground-water basins in Utah:

 Utah State Engineer Tech. Pub. 7, 96 p.
- Thomas, H. E., and Taylor, G. H., 1946, Geology and ground-water resources of Cedar City and Parowan Valleys, Iron County, Utah: U.S. Geol. Survey Water-Supply Paper 993, 210 p.
- Waite, H. A., Nelson, W. B., Lofgren, B. E., Barnell, R. L., and Butler, R. G., 1954, Status of ground-water development in four irrigation districts in southwestern Utah, in Progress report on selected groundwater basins in Utah: Utah State Engineer Tech. Pub. 9, p. 5-93.

Well-numbering system used in Utah

The well numbers used in this report indicate the well location by land subdivision according to a numbering system that was devised cooperatively by the Utah State Engineer and G. H. Taylor of the Geological Survey about 1935. The system is illustrated in figure 1. The complete well number comprises letters and numbers that designate consecutively the quadrant and township (shown together in parentheses by a capital letter designating the quadrant in relation to the base point of the Salt Lake base and meridian, and numbers designating the township and range); the number of the section; the quarter section (designated by a letter); the quarter of the quarter section; the quarter of the quarter-quarter section; and, finally, the particular well within the 10-acre tract (designated by a number). By this system the letters A, B, C, and D designate respectively the northeast, northwest, southwest, and southeast quadrants of the standard base and meridian system of the Bureau of Land Management, and the letters a, b, c, and d designate the northeast, northwest, southwest, and southeast quarters of the section, of the quarter section, and of the quarter-quarter section. Thus, the number (B-2-2)12dcd-2 designates well 2 in the SELSWLSEL sec. 12, T. 2 N., R. 2 W., the letter B showing that the township is north of the Salt Lake base line and the range is west of the Salt Lake meridian; and the number (D-3-2)34bca-1 designates well 1 in the NE\2SW\2NW\2 sec. 34, T. 3 S., R. 2 E.

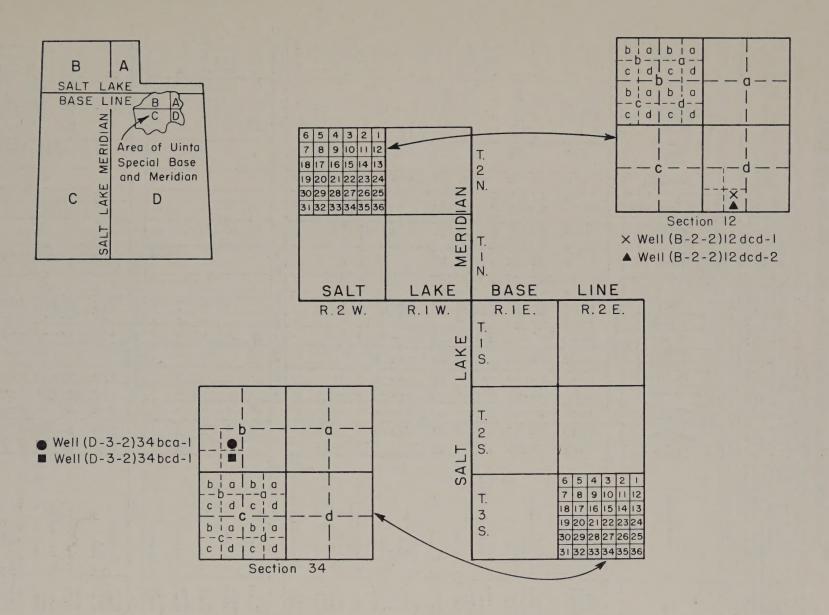


Figure 1. — Well-numbering system used in Utah.

Table 1.--Records of selected wells and springs in the Beaver, Escalante, Cedar City, and Parowan Valleys

Well number: See text for description of well-numbering system.

Method of lift: C, centrifugal pump; F, flowing; Cy, cylinder pump; N, none; J, jet pump; T, turbine pump; Ts, submersible turbine pump.

Pump: Type of power - D, diesel; E, electric; N, none; W, wind.

Use of water: D, domestic; I, irrigation; N, none; O, observation; P, public supply; S, stock.

Yield: All measurements made during 1962 except in the Beryl-Enterprise district where wells were measured in 1961 and 1962. Yields for Beryl-Enterprise district, Milford district, and Cedar City Valley, except where drawdown is listed in "Other available data" column, measured by the Utah State Engineer, all other measurements by the U.S. Geological Survey. Gpm, gallons per minute.

Depth to water-bearing aquifers: Data from Bureau of Economic and Business Research, University of Utah.

Other available data: C, chemical analysis in table 4; Dd, drawdown, the distance between the static and pumping water levels; H, hydrograph in figure 2; L, log in table 3; P, pumping levels and discharges in table 2.

Well	e 2; L, log in table 3; P, pur	(19)	well	of well nes)	of lift		ump quu	er	fdatum	aft 19	r level er pump 62, abo w (-) l datum	oing se ove (+) and-su	ason,	ure (°F)	.1d m)	water-bearing rs (feet)	available lata
number	Owner or user	Year drilled	Depth of (feet)	Diameter of (inches)	Method	Type of p	Horsepower prime move	Use of	Altitude o land-surface (feet)	Date	Water level	Date	Water level	Temperature	Yield (gpm)	Depth to wat aquifers	Other ava
							Bear	er V	alley								
(C-28-7) 15ccc-1 16aad-1 16dba-1 2ldaa-1	P. Larson L. Bradshaw V. Bradshaw L. Bradshaw	59 50 56 59	508 370 300 232	14 10 14 12	TTT	D E E	- 40 30 30	I,0 I I,0	6,179 6,220 6,205 6,152	4-4	-95.9 - -34.4	- - 10-16	-31.0	- 60 - 53	707 - 458	:	c.
(C-29-7) 3cbb-1 16aaa-1 19baa-1 19bad-1 19bcd-1	H. Hodges Bradshaw and Baldwin W. Yardley J. Morgan P. J. Smith	50 - 50 50	185 - 136 256	36 14 14 12 16	N T T	N E E E	- 30 30 40 40	0 I,0 I I,0	6,064 5,978 5,795 5,790 5,769	4- 4 4- 4 - - 4- 2	-60.7 -	10-16	-16.3 - - -14.2	54 - - 56	1,145 1,310	49, 74, 173 	H. L.
21baa-1 21cad 21cda-1 21cdb 28dbd-1	R. Yardley Utah Fish and Game Comm. do do P. Anderson	34	140	12 - 6	T T J	D E - E	50 -	I,0 S S D,0	5,869 5,822 5,820 5,822 5,860	4- 2	-	10-16	-18.9	56 54 57		34, 83, 115	H. C, spring. C. C, spring. H, L.
32daa-1 32dbd-1	D. Harris A. T. Smith	50	228 156	12 14	T	E	40 30	I,0 I,0		4- 4	-15.5 -36.0	-	-	57	563 812	55, 139, 200	
(C-29-8) 9bad-1 20caa-1 23cab-1 24aaa-1 24dba-1	O. and D. Harris S. Jessup M. Smith J. Morgan R. Yardley	34 59 61 -	150 175 440 -	6½ 12 14 14 14	Cy T T T	W E D E	- 30 40 - 30	SIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	5,618 5,580 5,720 5,794 5,745		-			64 54 63 62	538 - 818 467	130 46	С.
25cac-2	Greenville Ward, Latter-	05	340	2	F	N	-	1,0	5,668	5- 7	+10.5	10-16	+11.2	68	-	-	C, H, L.
31add-1 35bad-1 36aca-1 36aca-2	Day Saints Church R. Kessler Abandare Canal Co. do do	56 61 34 34	310 514 360 360	14 16 7 7	TF	D E -	1111	I,O I I I	5,554	4- 2	-41.5 - -	10-16	-43.0	53 61 -	920	37 90 - -	С.
(C-29-9) 36dcc	Minersville Res. and Irr. Co	-	-	-	-	-	-	I	-	-	-	-	-	53	-	-	C, spring.
				I	Escal	ante	vall	ey, E	Black Ro	ck di	strict		_				
(C-25-9) 17dab-1	C. E. Lewis	40	129	31/2	-	-	-	N	-	-	-	-	-	-	-	-	L.
(C-25-10) 5cdd-1	V. Kaufman	57	62	6	-	-	-	N	-	-	-	-	-	-	-	-	L.
(C-25-11) 9cad-1	Bureau of Land Management	47	329	6	-	-	-	N	4,989	-	-	-	-	-	-	-	L, dry hole.
(C-26-10) 32cad-2	R. Pearson	49	332	6	Су	W	-	S	4,878	-	-	-	-	-	- "	-	L.
(C-27-10) 6ddb-1	L. Bagnall	-	-	-	Су	W	-	S	4,915	6-21	-9.5	-	-	56	-	-	C.
		1				alan	te Val	ley,	Milford	dist	rict			1			
(C-27-10) 29dbc-1 31bdd-1 31cac-1	L. Sullivan D. Kirk P. Theobald	17 - 56	231 700 700	4 - 14	N N T	N N D	-	N N I,O	4,959 5,060 5,046	-	-85.7	10-11	-88.6		743	ī	L. L.
(C-28-10) 7adb-1 7dab-1 8cac-1 8dbb-1 16cda-1	City of Milford do Gillians and Myers do J. Mayer	47 41 - 55 -	-	14	T N T T	E N E D	15	P N I I	5,000 4,970 4,955 4,959 5,026	4- 2			-	78	- 350 350 890	298, 420, 440	C.
16cdd-1 17acb-1 17ccc-1 17cdc-2 17cdd-1	Gillians and Myers M. H. Pool G. C. Goodwin do K. Taylor	60 - 34 53 49	92 220	14 14 14	TTTT	D E E E	75 75 75 75 75	I I,0 I	5,026 4,970 4,970 4,971 4,975	3-31	-17.4	10-11	-22.7	58	980 157 545 407 594	- 37, 65, 86 24, 50 40, 58, 102	C. Dd 21.5 ft. P, Dd 15.3 ft.
17dcd-1	E. Smith	51	155	14	T	Е	7½	I	4,986	-	-	-	-	-	315	-	

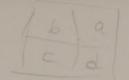


Table 1 .-- Records of selected wells and springs in the Beaver, Escalante, Cedar City, and Parowan Valleys - Continued

Well number	Owner or user	Year drilled (19)	Depth of well (feet)	Diameter of well (inches)	Method of lift	Type of power	Horsepower of d	Use of w	Altitude of land-surface datum (feet)	Date Olade	Water level	oing se ve (+) and-su (feet)	or or or	Temperature (°F)	Yield (gpm)	Depth to water-bearing aquifers (feet)	Other available data
			E	scal	ante	Val1	ey, M	ilfor	d distr	ict -	Continu	ied					
(C-28-10) 18aca-2 18cbc-1 19abd-2 19acc-2 19add-2	G. C. Goodwin L. Mayer T. E. Walker C. Marshall do	55 61 - 54	180 193 189 200 160	14 14 10- 14 14	TTTTT	EEEE	7½ 5 10 15	I I,0 I I,0	4,930 4,970 4,970 4,973 4,974	3-31 - 3-31	-18.6 -18.6	10-11	-23.2	1 1 1 1 1	430 - 505 436 426	68	H, Dd 29.4
19bbc-1 19bcd-1 19cbd-1 19ccd-4	L. Mayer do D. Yardley do	35 36 - 35	71 58 90 102	14 12 14 16	TTT	EEE	5 7½ 10 7½	I	4,969 4,972 4,974 4,976	1111					-	14, 34, 46 16, 82	
19dac-1 19dad-2 19dcc-2 19ddd-1 20bbd-2	J. Ballenger do H. L. Tolley F. Wright W. Nichols	35 57 52 - 56	86 280 125 109 140	14 14 11 16 14	TTTTT	EEEE	10 30 15 - 7½	I	4,977 4,978 4,980 4,981 4,974	11111		1 1 1 1 1	-		- 464 356 378	29, 57, 77 27, 60 37, 81, 103	
20bdd-1 20ccc-1 20ccd-2 20cdd-2 20dda-1	D. Jones do do J. Ballenger C. R. Wiseman	57 57 52 58	85 90 344 120 360	16 14 14 14 14	TTTTTT	E E E D	10 30 10 15	I	4,974 4,982 4,983 4,985 4,992			11111			995 286 364 -	60 40, 66, 93	
20dcd-1 20ddd-1 21ccd-1 28cdd-1 29add-1	do do do J. Miner Mayer Bros.	50 46 54	65 410 316 355 543	12 14 12 16 16	TTTT	EEEE	40 40 10 40 75	I I I,0 I	4,992 4,997 5,009 5,019 4,999	3-31	-32.3 -40.7	10- 8	-48.0 -	62 58 -	387 837 194 935 800	-	L. C.
29bcc-2 29bcd-2 29bdd-2 29cad-2 29ccc-1	M. Williams do D. Evans J. H. Lofthouse W. Yardley	53 36 56 56 36	257 70 200 204 74	14 14 14 14 14	TTTTT	E E E	30 10 15 10	I	4,989 4,989 4,991 4,994 4,991				-		890 230 445 216	19, 40 - - 35 10, 41, 69	
29ccd-2 29cdc-2 29dcc-2 29ddd-1 30acd-2	do do L. Rowley J. Miner M. Williams	60 56 58 54 50	156 220 180 365 99	12 14 14 16 16	TTTTT	EEE	15 15 30 75 7½	I	4,993 4,995 4,999 5,005 4,981			-			266 580 518 387 292	50 30 67, 106, 169 16, 44, 92	
30adc-1 30bdc-2 30bdd-2 30cac-1 30cad-2	do J. Baldwin do C. Griffiths D. Yardley	35 53 52 -	100 131 148 196	14 14 16 16 16	T T T	EEEE	7½ 10 10 10 7½	IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	4,981 4,982 4,981 4,989 4,990	-				58	315 350 410 180		C.
30cdc-2	M. Griffiths	54	160	14	T	E	15	1,0	4,994	3-31	-30.5	10- 8	-45.6	-	380	36, 101, 145	P, Dd 43.5
31acd-2 31adc-2 31bac-2	C. Gillians Beaver Stake, Latter-Day Saints Church R. Thurston	56 51 35	140 175 160	14 14	T	E	7½ 20	I	5,001 5,002 4,997	-	-	-	-		715 216	72, 114, 130	
31bad-2 31bcd-2 31bdd-1 31bdd-3 31cad-2 31ccd-3	R. W. Jones H. Naruse C. Gillians H. Naruse C. Gillians F. Myers	53 54 56 - 36	290 136 160 240 150 128	14 16 14 14 14	TTTTTTT	EEEEE	15 15 7½ 20 7½ 20	I	4,999 5,002 5,003 5,003 5,008 5,008	-	-	-			310 378 393 337 400 598	40, 236	Dd 22.9 ft
31cdd-2 31dcc-2 31dcd-2 31ddc-2 32aad-1	O. T. Puffer do do L. Gillians J. H. Valine	52 60 55 49 56	172 220 176 195 171	14 12 16 12 14	TTTTT	EEEE	10 10 20 15 15	IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	5,012 5,013 5,013 5,012 5,004	-				58	617 292 545 518 378	42, 117, 161 60 - 70, 145, 164	
32bad-1 32bbc-1 32cac-1 32ccd-2 32cdc-1	W. Yardley do D. Alger L. Paice C. E. and L. Paice	35 36 52	84 132 109 102	14 14 14 14 14	TTTTT	E E E E	10 15 25 15	IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	5,000 4,992 5,009 5,011 5,014	11111					297 378 562 197	36, 60, 81 72, 97, 105 58, 65, 80	
32dcc-1 32dcd-1 32ddd-1	do do G. Van Tasslle	40 55 54	300 287	14 14 14	TTT	E E	20 30 60	I I,0	5,015 5,019 5,021	3-31	-46.3	10-16	-57.8	- - 48	374	34, 51	
(C-28-11) 3dba-1 12dbc-1 22dab-1 23cbb-2 24daa-1	A. Hansen M. Persons Houston and Goff L. Gronning L. Mayer	54 39 52 50	500 460 72 95 204	14 8 16 12	N T J T	N D D D	7½	N I S,O I I,O	4,978	- 4- 2 - 3-31	-	-	-41.6 -	63 - 58 -	784 - 820 378	70 54 38 70, 180, 188	L.
25abd-1 25dcd-1 25ddd-2	G. Smith Green Diamond Ranch K. Smith	28 50 54	77 431 150		T	E	10 75 10	I,0	4,974 4,986 4,989	4- 2	-22.9	-	-	67	356 1,850 301	71, 93, 130	c.

Table 1.--Records of selected wells and springs in the Beaver, Escalante, Cedar City, and Parowan Valleys - Continued

	Table 1 Records of selec	ted v	wells	and	spri	ngs	in the	Beat	er, Esc					rowar	Valley	vs - Continued	
		(61) 1	well	of well	lift		of dum	water	of adatum	afi	er leve ter pum 962, abo w (-) datum	ping s	eason,) or urface	re (°F)		water-bearing rs (feet)	available ata
Well number	Owner or user	Year drilled	Depth of (feet)	Diameter of	Method of	Type of power	Horsepower of	J.	Altitude (land-surface (feet)	Date	Water level	Date	Water level	Temperature	Yield (Spm)	Depth to wate	Other avai
		-	E	scal	ante	Val	ley, M	ilfor	d distr	ict -	Contin	ued					
(C-28-11) 35aad-1 35add-1 35ddd-2 36aad-1 36add-2	M. Stewart I. Stewart D. Sly J. Moore G. Smith	35 51 52 49	51 171 150 110 154	14 14 16 16 16	TTTT	EEEE	7½ 7½ 15 10	I I,0 I I,0	4,987 4,992 5,000 4,996 4,998	4- 2	-23.4	10-16	-42.2	111111	234 185 513 441 268	12, 46 - 54, 110, 143	Dd 26.9 ft.
36bac-1 36bdd-2 36cad-3 36cbd-2 36cca-1	W. J. Stewart M. Stewart I. Stewart Mayer Bros.	49	140 230 170 78 84	14 14 14 14 14	TTTT	EEEE	7½ 10 10 7½ 7½ 7½	I	4,986 4,992 4,998 4,997 4,997					11111	436 563 333 - 437	-	
36cdd-3 36dcc-3 36ddd-2 36ddd-3	H. S. Thompson do D. Rollins do	51 51 36 56	156 100 80 204	16 16 14 14	TTTT	EEE	15 10 10 7½	IIII	5,001 5,002 5,005 5,005		-		-		563 297 275 185	38, 66, 138 50, 65, 98 32, 49, 71 25	
(C-29-10) 5add-1 5bac-2	G. Van Tasslle Beaver Stake, Latter-Day Saints Church	53 53	310 178	16 14	T	E	40	I	5,031 5,020	-	-	-	-		428	-	
5cad-2 5cdd-3	G. Van Tasslle do	57 49	300 198	14 12	T	E	20	I I,0	5,031 5,037	3-31	-58.3	10-16	-72.4	56	1,052 254	*	C, P, Dd 18.6 ft.
5dcd-1 5ddd-1 6aad-1	do do A. A. Jones	58 61 54	320 - 168	16 16 14	NTT	N E E	7.5 20	NII	5,039 5,043 5,020			-	-		333	74, 121, 135	L.
6aca-1 6baa-1 6cdd-1 6dcd-1 6ddc-2	J. Mayer do Mayer Bros. do T. Bown	52 53 47 49	200 200 350 235 200	14 14 14 14 14	TTTT	EEEE	20 20 75 25 20	I I I I,0	5,022 5,013 5,030 5,031 5,031	3-31	-53.4	10-16	-65.0		365 531 1,535 702 426	87, 131, 181 55, 110 61, 138, 179	H, Dd 35.4
7bda-2 7ddd-1 8add-1 8cdd-1 8ddd-1	V. Lee R. Mayer Milford Farms do do	56 48 - -	197 245 - 218 210	14 16 16 16	TTTTT	E D E E	30 - 75 60 75	I I I,0	5,033 5,054 5,055 5,060 5,066	3-31	-75.4			60	440 1,150	46 57, 168, 209	ft.
16cdc-1 17add-1 17cdd-1 17ddd-2 18add-2	E. Myers Milford Farms do do R. Mayer	52 50 50 60 60	192 202 201 220 450	16 16 20 16 16	TTTTT	EEED	40 75 75 75	I	5,120 5,078 5,082 5,090 5,065					56	1,007	:	L.
18dad-1 18ddd-1	do do	55 50	314 170	16 16	T	D D		I	5,067 5,072	-	-	-	-		-	70, 100	
(C-29-11) labd-2 lada-2 ladd-2 lbad-1 lcac-1	W. Powell Mayer Bros. O. Williams M. Price D. Sly	56 49 55 50 48	230 145 200 140 72	12 14 14 14 14	TTTT	EEEE	7½ 15 20 20	I	5,008 5,009 5,014 5,004 5,010	11711				11111	304 418 635 652 457	65, 80, 109	
1cad-3 1ddd-1 2aac-2 2adc-1 2ddd-2	do Green Diamond Ranch J. Sherwood L. Applegate do	53 50 56 55 56	225 210 204 200 200	16 16 14 12 14	TTTTT	EEEE	10 75 10 10 20	I	5,012 5,023 5,002 5,004 5,009	11111				58	418 1,223 489 419 635	26, 46	Dd 13.6 ft.
4baa-1 1laad-2 1lacd-2 1lbaa-1 1lcad-2	W. H. Child T. Rimpau do Cook Bros. L. Applegate	26 53 55 -	68 220 82 57 96	16 16 12 16 14	Cy T T T	WEEE	25 10 5	S,O I I I	5,023 5,010 5,010 4,999 5,010	4- 2	-40.7 - - -	10-11	-40.6 - - -	60	313	36, 62, 64	C. L.
11ccd-1 11cdd-2 11ddc-1 11ddd-1 12add-1	R. Mayer L. Applegate Cook Bros. do Green Diamond Ranch	49 27 52 47	62 90 65 83 202	14 16 14 18 14	TTTTT		7½ 10 - 5 50	I I,0 I I	5,013 5,018 5,019 5,019 5,030	4- 2	-31.3	10-11	-34.9	58 58 - -	527 980 - 820	108, 140, 172	c.
12ddc-1 12ddd-1 13add-1 13dcc-1 13ddd-1	do do L. Cox do do	50 46 - 47	240 431 276 300 248	16 16 14 16 16	TTTT	E E D E	50 75 30 -	I I,0 I	5,034 5,036 5,043 5,043 5,053	- 4- 2 -	-55.9	10-11	-61.6 -	- 58 - 59 -	1,350 1,300 - 1,388	80, 164, 258 158, 212	С.
14aad-2 22add-1 23bdd-1 23cad-1 27ada-1	K. Williams Milford Farms L. D. Tonn Milford Farms R. A. Hildebrand	52 52 50 52 -	210 320 204 218	16 16 16 14 14	TTTT	E D D E E	30 25 75 -	I I I,0 I	5,023 5,027 5,037 5,039 5,039	4- 2	-43.8			1 1 1 1 1	1,282 - 1,610 783 575	20, 46, 70 110 46, 70, 168	
27add-2	do	47	109	14	T	E	25	I	5,042	-	-	-	-	-	784	-	

Table 1.--Records of selected wells and springs in the Beaver, Escalante, Cedar City, and Parowan Valleys - Continued

	Table 1Records of select	ted w	rells	and :	sprin	igs :	in the	Beav	er, Esc	alante	, Cedar	r City	, and Pa	rowan	Valley	s - Continued	
		(61) Pa	f well	of well	of lift	power 4	wer of d	water	e of ce datum t)	aft 19	er level er pump 62, abo w (-)	ping s	eason,) or urface	ure (°F)	1d (n)	water-bearing rs (feet)	available ata
Well number	Owner or user	Year drilled	Depth of (feet)	Diameter of (inches)	Method	Type of po	Horsepower prime move	Use of	Altitude o land-surface (feet)	Date	Water level	Date	Water level	Temperature	Yield (gpm)	Depth to wate	Other ava
													Wa			De	
(0.00.11)			E	scal	ante	Val.	Ley, M	ilfo	d distr	ict -	Continu	ued					-
(C-29-11) 27bad-2 27bdd-1 27cad-1 27cda-1	R. A. Hildebrand do do do	51 49 48 55	200 155 300 216	12 14 16 16	TTTT	EEE	30 15 - 30	III	5,032 5,044 5,036 5,036			-	-		980 - - 783	72, 132, 151 68, 164, 190	L.
27dab-1 27dad-1	do do	50	300	16 16	T	E	15 40	I I,0	5,038 5,045	4- 2	-48.4	10-11	-50.7		563 883	-	H, P, Dd
28aad-3 28add-2	E. Jeppson O. Kessler	53	203 196	16 12	T	E	30 20	I	5,020 5,018	-	-		-	- 57	1,223 575	-	16.8 ft.
(C-29-12) 35ddd-1	U.S. Geological Survey	53	102	4	N	N	-	0	5,093	4- 2	-84.2	-	-	-		-	L.
(C-30-9) 7acc-1	Minersville City	-	-	14	T	E	-	P	5,319	4- 2	-9.0	-	-	92		-	C.
(C-30-10) 10baa-1 19abd-1	S. Carter J. Craw	55 60	320 293	14 16	NT	N D	-	0 1,0	5,202 5,142	3-31 3-31	-140.4 -99.6		-139.7 -100.1	56 70	970	100, 254 112, 144, 184	C. C, Dd 174.4 ft.
(C-30-11) 4baa-1 12bbb-1	R. Davie U.S. Geological Survey	53 53	299 112	16 4	T	D N	-	1,0	5,031 5,083	3-31 3-31	-31.5 -62.6	-	-	1 1	1,965	105, 148, 280	Н, L.
(C-30-12) 11cbc-1 28	A. and G. L. Marks Bureau of Land Management	-	401	-	N N	N N	-	N N	5,034 5,040	-	-	-	-	167	-	-	L. C, Thermo Hot Springs.
(C-30-13) 22ccc-1	D. Larson	-	-	-	Су	W	-	S	-	-	-	-	-	59	-	-	C.
					Esc	ala	nte Va	lley,	Lund d	istric	t				,		
(C-31-13) la-1	Cook Bros.	-	116	-	-	-	-	0	5,071	5-16	-28.3	10- 9	-29.2	-	-	-	L, H.
(C-31-14) 24caa-1	do	42	207	5	Су	W	-	S	-	-	-	-	-	-	-	184	L.
(C-32-13) 9bdd-1 11dad-1	A. Frahske Nada Land and Livestock Co.	16 35	340 132	12 6½	T -	D -	-	I	5,105	-	-	-	-		-		L.
(C-32-14) 21bad-1 28bbb-1	Union Pacific Railroad Effie Boileau	25	746	10 10		-	-	P	5,082	5- 1	-3.5	10- 9	-4.4	1.1	-	-	L. H.
(C-33-13) 3caa-1	Bureau of Land Management	-	-	8	Су	W	-	S	5,147	5- 9	-65.6	-		57	-	-	c.
(C-33-14) 6acb-1 15dbd-1	R. Lyman Bureau of Land Management	47	230 140	12	-	-	-	N N	5,118	-	-	-	-		-	142, 200, 227	L.
(C-34-13) 16ccc-1	D. Schoppman	56	172	8	Су	W	-	S	5,233	4-23	-98.4	-	-	64	-	-	c.
				Esca	lante	Va.	lley,	Beryl	-Enterp	rise d	istric	t					
(C-33-15) 31bcc-1 31cbb-1 33dbc-1	W. Cozby J. Carlson J. G. Garvin	47	275	12 6 16	T -	D -		I O N	5,035 5,133 5,111	3-27	-26.2	10- 2	-27.0		-	198, 256	H. L.
(C-33-16) 13cba-1 23aaa-1 23abb-1 25bba-1	W. H. Wood do do C. R. Burns	52 50	165 203	16 14 16	TTTT	DDDD	1111	I	5,170				-		740		
30aac-1 30cac-1 32aba-1	J. Delvecchio A. and B. Larson Union Pacific Railroad	49	154 - 208	14	TTT	D D		II	5,147	3-27	-63.4 -		-	1111	750	71, 114, 150 - 175, 180, 200	L.
(C-34-16) 18bcc-2 28acc-2 28bcc-3 28ccc-1 28dcc-2	K. L. McGarry D. Horsley F. Koch C. Reber	29 50 61 56	136 131 120 248 148	14 12 16 16 14	- T T T	EEE	15 15 15 30	N I I I	5,142 5,135 - -	3-30	-18.6	10- 9	-20.3	54	510 595 - 1,040	73, 99, 130 	L. L.
29ccc-1 30ccc-1 30dcc-1	J. Saylin D. F. Shelley do	48 43 46	203 250 280	16 12 12	T	E	25 15 20	I,0 I	5,140	3-30	-18.1	10- 2	-22.3		988 520 645	118, 153, 188	

Table 1.--Records of selected wells and springs in the Beaver, Escalante, Cedar City, and Parowan Valleys - Continued

	Table 1Records of selec	red W	rells.	and .	spri	ngs :	in the	Beav	er, Esc	alante	e, Ceda.	r City	, and Pa	rowan	Valle	/s - Continued	
Well		(61) pa	of well	eter of well (inches)	of lift	power	over of d	water	itude of urface datum (feet)	af 1	er leve ter pum 962, ab ow (-) datum	ping s	eason,) or urface)	ure (°F)	Yield (gpm)	water-bearing rs (feet)	available ata
number	Owner or user	Year drilled	Depth o	Diameter (incl	Method	Type of p	Horsepower prime move	Use of	Altitude land-surface (feet)	Date	Water level	Date	Water level	Temperature	Yie (81	Depth to wat	Other av
		E	scala	inte '	Vall	ey, 1	Beryl-	Enter	prise d	istri	ct - Co	ntinue	1				
(C-34-16) 30ddc-2 31ccc-1 31cdc-1 31dcc-1	D. F. Shelley D. Hall do J. C. McGarry	58 52 53	100 160 212 248	12 12 12 12	TTTT	EEE	25 25 25	III	-		-	1 1 1		55	575 470	90	
32bcc-1 32ccc-1 32cdc-1	R. A. Gardner do do	- 46 54	199 248 200	16 12 16	T	E	30 40 30	III	-	-		-	-	-	845 1,196 1,080	82, 198, 231	
(C-34-17) 24acc-2 24bcc-1 33dcc-1 36acc-1 36ddc-1	H. L. Austin M. Austin W. MacFarlane J. Rall A. Schwartz	26 28 47 48 47	105 120 224 184 150	12 12 14 14 14	CTTTT	EEE	25 30	I I I,0 I	5,151 - 5,153	3-30	-28.5	1 1 1	-	57	310 430 595 -	40, 62, 96 40, 62, 96 92, 150, 220 69, 133, 175	
(C-34-19) 36dbc-2	Union Pacific Railroad	-	392	-	N	N	-	-	-	_	-	-	-	-	-		L.
(C-35-15) 3dcc-1 3dcc-2	E. J. Graff do	27	350	16	Cy	WE	30	0	5,139 5,139	3-28	-21.5	10- 2	-26.6	- 56	610 888	GP PR	H. C, P, Dd 31.0 ft.
3ddc-1	do	27	350	16	T	E	25	I	5,139	-	100	-	-	56	1,300	600 6	C, L, Dd 21.5 ft.
10acc-1 10acd-1 10adc-1 10add-1 10bdc-2	do do do do C. Holm	27 27 27 27 27 36	334 280 400 350 271	16 16 16 16 16	TTTT	EEE	30 30 25 25 40	I I I,0	5,143 5,142 5,144 5,143 5,142	3-28	-21.6	10- 2	-28.0	58	1,240 770 593 645 960	-	
10cdc-1 11bcc-1 16ddd-1 20bcd-1 22dcd-1	F. Bekins E. J. Graff K. Jones Bureau of Land Management C. Hulet	58 49 48 - 47	310 255 162 257	16 16 16 -	T T N	E	30 30 - 30	I I,O N I	5,156 5,159	3-28	-34.5	10- 2	-38.9	- 56 - 57	850 875 - 840	62, 248, 303 40 108, 224, 244	L. Dd 30.9 ft.
28acc-2 28adc-1 28dcd-1 33cdc-1 33dcd-1	R. Reeve do F. Bekins Columbia Iron Mining Co. do	45 58 52	163 200 200 254	12 14 16 16 14	TTTT	E D E E	30 25 - 75 50	I I I,0 I	5,135	3-28	-94.4	1 1 1 1		66	747 - 980 1,300	56, 134, 161	
(C-35-16) 3cdc-1 3dcc-2 4dcc-1 6bbc-2 6dbc-1	R. J. Kaltenborn do O. M. Sharp W. Hunt W. Holt	52 52 53 - 55	200 206 166 - 220	14 15 16 14 16	TTTTT	EEEE	50 50 30 20	I I I,0 I	5,151	3-30	-31.8	10- 2	-37.2		1,460 1,380 890 790	124, 156, 189 36, 100, 130 - 75, 166, 216	Dd 35.9 ft.
7abc-1 7ccc-1 9aad-1 9add-1	H. G. Moyle A. Barlocker L. Bowler	33 55 46	75 104 150 150	12 12 16 16	TTT	EEE	15 40 20	I I I,0	5,155 5,158 - 5,150	3-30	-36.8	10- 9	-39.5	55	507 1,125 640	103, 110, 132	C, P, Dd
9cbc-1 9dac-1 10acb-1 10bda-2 14ccc-1	N. Laub C. Holm C. Anderson do J. C. McGarry	51 - 47 36 50	126 154 80 117 192	12 14 12 14 14	TTTTT	E D D E	20 15 - 30	I	5,151 5,151		-	1 1 2	1111		895 488 912 - 1,085	-	16.1 ft.
14dcc-1 14ddc-1 15abc-1 15bba-2 16add-1	do do M. F. Dewey D. Burgess N. Bracken	- 47 - 61 49	167 100 120 185 116	14 14 12 12 14	TTTTT	EEEE	30 15 15 15 15	I I,0 I I	5,155	3-30	-39.4 -	10- 9	-40.7	55	745 525 600 1,090 396	-	Dd 8.8 ft.
16bbc-1 16bdd-1 16cac-1 16cdd-1 16dda-2	M. Beckstrom J. Romera G. T. Wuertz R. Hunt L. Wood	46 58 61 42 61	274 163 183 125 214	12 12	TTTT	EEE	15 10 10 15 15	I,0 I I I	5,154	3-30	-39.2 - - -	10- 9	-43.2		600 712 350 622 750	104, 129, 151	
16ddc-1 17acc-2 17add-2 17bad-1 17cda-2	M. Beckstrom	47 61 52 - 50	152 179 103 120 148	12	TTTTT	EEEE	25 15 15 15	IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	5,152 5,154	1 1 1 1	-			-	1,025 495 322 - 965	-	L.
18cb-2 18cdc-1 20dad-1 21acd-1 21bcc-1	J. Bosshardt do G. Butler B. Beacham A. D. Moyle	- 61 - 47 44	160 185 200 105 120		TTTT	E D E E	30 - 15 20	IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	5,160	-				-	872 - - 1,060	-	7
21bdc-1 21cac-1	do A. Piper	54	178 155	16 14	T	E	30 15	I	-		-	-	~	52	911 715	-	

Table 1. -- Records of selected wells and springs in the Beaver, Escalante, Cedar City, and Parowan Valleys - Continued

	Table 1Records of selec	tea t	wells	and :	spri	ngs :	in the	Bear	er, Esc	alante	e, Ceda	r City,	and Pa	rowar	Valley	s - Continued	
		(19)	well	f well	lift		ump qui	of water	of e datum	aft 19	r level er pump 62, abo w (-) l	oing se ove (+)	ason,	e (°F)		water-bearing rs (feet)	available ata
Well number	Owner or user	Year drilled	Depth of (feet)	Diameter of (inches)	Method of	Type of power	Horsepower o	Use of w	Altitude of land-surface (feet)	Date	Water level	Date	Water level	Temperature	Yield (gpm)	Depth to wate aquifers (Other avai
			1		7.11.			** .								De	
(= 0.1.10)		1	sscala	inte	Valle	ey, l	Beryl-	-Enter	prise d	listrio	t - Co	ntinued					
(C-35-16) 21dcc-1 21ddc-1 22add-1 22ccd-1 22dcc-2	A. D. Moyle L. D. Love D. Goddard L. Sevy	- 31 47 57	204 156 147 206 226	16 14 12 14 12	TTTT	EEEE	40 20 30 20 30	IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	5,161 5,164				-	- - - 57	708 895 520 - 1,385	39, 76, 126 	L.
23bcd-1 28bdc-1 28cdc-1 29acc-1 29ccd-1	A. L. Graff B. Biasi C. T. Holland R. W. Smith F. Ence	48 - 57	160 205 185 194 194	12 18 18 16 16	TTTTT	E E E	25 50 30 50 40	I I,O I I	5,166	3-30	-49.9 - - -	10- 4	-57.6		858 1,740 1,645 - 1,400	-	L.
29dcc-1 29ddc-1 30dcc-1 31abc-1 31acc-2	P. Harker do S. P. Lipoma do do	55	140 200 155 162 162	12 14 16 14 14	TTTT	E E E	20 30 25 50 30	I I I,0 I	5,178	3-30	-58.8	10-4	-65.5	57	816 825 518 1,097 600	-	P.
31bdc-1 31cbb-1 31ccc-1 31cdc-1 31dcc-1	L. V. Robinson C. W. Whitelau J. C. McGarry W. Randall F. B. Dalton	- 47 46 46 48	155 195 209 182 140	12 16 12 14 14	TTTTT	EEEE	15 25 - 30 25	I						11111	577 562 - 970 742	-	
31ddd-1 32acc-1 32bcd-1 32ccc-1 32cdc-1	do T. C. Alberto A. Pederson E. B. Farnsworth do	47 45 46 58 50	160 168 173 176 176	14 16 16 14 14	TTTTT	EEEE	30 40 40 30 30	I						11111	717 1,510 1,035 883 822	60	Dd 8.5 ft.
32dcd-1 33bdc-1 33cbb-1	J. C. McGarry C. Twitchell H. G. Moyle	48 62 -	452 - 130	16 - 12	TTT	E	25 - 20	I	-	-		-	-	111	947 - 850	-	
(C-35-17) lecc-1 ledc-1 ldcc-1 ldcd-1 3ccc-1	W. W. Price G. Clove J. Reber do N. Neilson	54 47 47 - 47	207 114 260 - 240	16 12 16 14 12	TTTT	EEEE	25 25 30 40	I I I,0	5,190	3-30	-56.6	10- 4	-58.2		585 612 770 650	54, 104	
4acc-1 4dcc-1 7daa-1 12abb-1 12acc-1	M. Langford C. MacFarlane W. W. Adams L. Moyle J. B. Moyle	47 48 47 - 60	176 207 200 110 392	14 14 12 13 12	TTTT	EEEE	30 25 - 15	I	5,161	11111		-	-	60	818 495 610	92, 150	
12bcc-1 12bdc-1 12dcd-1 12ddc-1 13acc-1	F. S. Price W. H. Mathews A. Feldsted A. Barlocker J. E. Moyle	48 - - 49 54	161 86 202 200 300	12 12 12 16 16	T T T	EEE	25 30 15 25 30	I	5,160	11111	-			55	765 445 482 1,015	90, 160, 232	
13adc-1 13bdc-1 13ccc-1 14ccc-1 21acb-1	H. Holt A. D. Moyle H. G. Moyle H. Randall J. Simkins	55 - 49 47 -	240 95 200 300	13 16 16 16 16	TTTT	E E E	20 25 50 30	I 0 I,0 I	5,166 - 5,182	3-27	-47.7 -57.4	10- 4	-52.8	- 60		80, 156, 191 78, 96, 120	н.
22bcc-2 23acb-1 25cdd-1	P. L. Morris H. G. Moyle H. Brenn	48	- 125 58	16 12 50	T T	- E	20	0 1 0	- 5,180	3-30	-66.8	10-14	-69.8	1 1 1	935	-	H, dry after
25dca-2 25dcd-1 36dcc-1	C. Bosshardt do C. Mettler	30 49	110 158 200	12 14 16	N T T	N E E	40 25	I,0 I,0	5,182 5,180 5,191	3-30 3-30	-62.7 -71.7	10- 4	-76.6	57	1,225 816	34, 75, 98 38, 102, 150	L. H. Dd 19.5 ft.
(C-36-15) 4dcd-1 7dba-1 7dcc-1 9dbc-1	Columbia Iron Mining Co. S. Tullis V. Pickerell D. Bering	47	235 250 - 175	16 14 16 6	T T Cy	E E D W	1111	I I I S	-				-	68 87 65 55	925 - 1,580	95, 120, 137	C. C.
18acb-1 18caa-1 19ccc-1	V. Pickerell do Christensen Bros.	51 51 -	400 233 217	16 18 16	TTT	D D E	30	I,0 I I,0	5,225	3-28	-	10- 4	-99.4 -101.1	74	950 350	102, 150 80	
(C-36-16) 3c-2 3d-1 4a-2 4b-2 4b-3	V. Pickerell do H. Randall W. Holt W. Randall	1 1 1 1 1	196 207 200 144	20 16 16 16 16	TTTT	D D E E E	25 30	I I,0 I	5,190	3-28	-74.5	10- 4	-79.6 -	57	1,240 1,460 895 540 750	:	
4b-4 4d-1	S. Holt H. Sevy	-	250 300	16 16	T	E	30 30	I	-	-		-	-		525 815	:	

Table 1. -- Records of selected wells and springs in the Beaver, Escalante, Cedar City, and Parowan Valleys - Continued

	Table 1Records of selec	(19)	well	wel1	lift	Pı	тр	water	fatum	Wate aft	er level er pump 62, abo	before by the before the large terms and the large terms are the l	re and eason, or urface	(A.)	A.F	water-bearing ins (feet)	available ata
Well number	Owner or user	Year drilled	Depth of (feet)	Diameter of (inches)	Method of	Type of power	Horsepower o	of	Altitude or land-surface (feet)	Date	Water level	Date	Water level	Temperature	Yield (gpm)	Depth to wate aquifers (Other ava
		Es	calar	te V	alle	у, В	eryl-	Enterp	rise di	stric	- Con	tinued					
(C-36-16) 5a-1 5a-8 5a-9 5a-12 5b-2	W. T. Hunt G. Crawford E. Gardner G. Crawford H. Sevy		112 180 200 194 156	12 12 12 16 12	TTTT	EEEE	25 30 - 20 20	IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	5,190			1 1 1 1 1	-	- 57 57	622 730 720 950 480	-	C.
5b-3 5b-4 5c-1 6a-1 6b-2	do C. Clark L. Gardner Escalante Farms do	59 60 -	353 276 290 288	16 16 12 16 16	TTTTTT	EEEE	30 - 20 40 75	I I,0 I I I	5,196 - - 5,201	3-27	-81.6 - -	10- 4	-85.9	-	585 1,710 840 1,350 700	:	
6c-2 6c-3 9acd-1 9bcd-1 9ccc-1	do do L. Gox W. Scott H. Randall	- 46 44 61	270 200 214 272 250	16 16 14 14 16	TTTTT	EEEE	100 100 - 30 -	I I,0 I I,0 I	5,211	3-30	-92.7 -77.3	-	-98.3 -83.6	58 58 - 55	1,640 1,960 1,090 1,010	80, 148, 204	c.
9dcc-1 10bbd-1 10bdc-1 11caa-1 11dcd-1	do Gentry Bros. do V. Pickerel1 do	59 45 47 52 52	299 290 340 210 206	16 14 14 16 16	TTTT	E E D D	25 25 -	IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	5,191				-	56 - 57	650 640 885 940	215, 229, 281 - 113, 123, 162	
12bdd-1 13ddc-1 16bcc-1 16ccc-1 17acc-1	do Christensen Bros. M. and L. Gardner do Enterprise Farms	53 50 59 59	188 207 300 347 404	16 16 16 16 16	TTTTT	DEEE	30 - - 75	IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII							905 570 - - 1,190	236, 326, 346	
19abb-1 20abb-1	Jones Bros. Enterprise Farms	45 48	352 400	16 16	T	E	40 100	I,0 I,0	5,226 5,215	3-28 3-28	-108.0 -99.9		-113.7	57	1,350	120	P, Dd 35.2
20dbb-1 21abc-1 21cdd-1 29bab-1 29daa-1	do Jones Bros. A. Barlocker Enterprise Farms do	61	400 351 347 401 380	16 16 14 16 16	TTTT	EEEE	75 40 30 75 75	I I I I,o	5,233	3-28	-116.1	10- 4	-121.5		1,090 805 855 958 820	- :	ft.
30aab-1 30bab-1 30cba-1 30ccc-1 30dba-1	do do do S. Bracken Enterprise Farms	47 47 - 48	402 401 381 400 389	16 16 16 14 16	TTTTT	EEEE	75 100 100 30 75	I						55	1,520 1,455 1,460 340 1,300	95 - 370	Dd 10.7 ft.
31aba-1 31aca-1 31add-1 31bab-1 31bdd-1	do do do do do	- 49 45 -	349 407 381 419	16 16 16 16 16	TTTT	EEEE	75 100 100 100 100	I I I I,0	5,256	3-28	-137.0				1,220 1,710 1,465 1,150 1,510		
31ccc-1 32aaa-1 32add-1 33bdd-1	L. Huntsman Enterprise Farms do E. Hunt	46 47 -	222 401 401	14 16 16 14	TTTT	EED	25	I,O I I I	5,271	3-30	-146.1 - - -	10- 4	-154.4	51	405 - 923	105	C.
(C-36-17) 2d	Escalante Mining Co.	-	195	-	N	N	-	N	5,283	-	-	-	-	64	-		C, mine
2d-1 2d-2 25dcc-1	do do Enterprise Stake, Latter- Day Saints Church	59	600 247	6 16 16	NNT	N N E		O N I	5,243 5,242	-	-	-	-129.4	63	540	-	C.
36add-1 36ddb-1	N. Bracken A. Holt	45	382	14	T	E	50	I,0 I	5,265	3-30	-142.7	- 4	-147.7	50	755	130, 370	
(C-37-16) 6cac-1 6ccc-1	Truman, Jones, and Hunt Adams Bros.	48 45	304 200	16 14	T	E	40 25	I I,0	5,285	3-30	-114.3	10- 4	-120.2	50	770 420	130 82	P, Dd 28.1 ft.
(C-37-17) lccd-1 ldcc-1 lddc-1 lldac-1 1ldbb-1	H. Truman do L. Holt A. E. Pickering A. P. Windsor	49 - 45 45	483 250 205 86 223	16 14 14 16 12	TTTT	EEE	30 25 20 10 30	I,0 I,0 I I	5,290 5,290 - -	3-30	-84.7 - - -	10- 4	-89.9 -102.6	53	290 480 200 320 140	83, 112, 400	
12acc-1 12bdc-1 12cbd-1 14bac-1	I. Barlow C. Sides do Bushar, Holt and Simkins	45	320 170 150 100	16 14 14 14	TTT	EEE	25 20 15 20	I I,0 I I,0	5,300	3-30	-	10- 4	-	55 - 55	472 460 290 552	30, 80	C, H. C, H, P, Dd 46.3 ft.
15bab-3	N. Thomas	-	125	10	T	E	15	I	-	-	-	-	-	-	-	-	

Table 1 .-- Records of selected wells and springs in the Beaver, Escalante, Cedar City, and Parowan Valleys - Continued

		(61) 1	weil	of well	lift		of du	water	of e datum	af 1	ter pur 962, al ow (-)	mping a	or urface	(4°) e		water-bearing rs (feet)	available ata
Well number	Owner or user	Year drilled	Depth of (feet)	Diameter of (inches)	Method of	Type of power	Horsepower o	Use of w	Altitude on land-surface (feet)	Date	Water level	Date	Water level	Temperature	Yield (gpm)	Depth to wate aquifers (Other avai
42.00.101		1				_	Ceda	Cit	y Valle	у							1
(C-33-10) 29adc-1	Bureau of Land Management	-	-	-	Су	W	-	S	6,020	-	-	-	-	58		-	c.
(C-33-11) 15bbb-1 30ddd-1	do S. Wright	36	910 250	12	-	-	-	N O	5,616 5,352	3-22	-36.6	10-10	-37.4	-	-	50	L.
(C-33-12) 1laaa-1	Bureau of Land Management	-	-	-	Су	W	-	s,0	5,283	5- 9	-36.0	-	-	57	-	-	G.
(C-34-10) 30ddc-1 31caa-1	I. Jones	51	365	14	T	E	25 25	I,O	5,531 5,490	3-20	-26.3	-	-	59	200 450	-	
(C-34-11)														39	430		
9cdc-1 13bbc-1 36acc-1 36cdd-1	D. C. Evans H. Kunz D. Clark	42	121	3 16 14 16	TTT	DEE	15 30	0 1 1	5,402 5,395 5,452 5,458	3-27	-22.2	10-10	-23.0	56	890 350 510	28, 100, 114	н.
36cdd-2	do	-	128	16	T	E	20	1,0	5,460	3-22	-12.4		-	67	450	-	C.
(C-35-10) 7cad-1 7cdd-1	W. W. Jones P. Webster	36 36	101	8	T	E	- 7동	I	5,620 5,644	-	-	-	-	-	194	-	
18bbc-1 18cba-1	S. A. Smith P. Webster	-	-	12	T	E	15	I	5,536 5,559	3-27	-71.1	10-10	-100.5	57	-	-	H.
(C-35-11) 8ddd-2	J. Sherratt	53	260	16	T	E	20	I	5,491	_	_	-	_	-	311	_	
9abd-1 9ccc-1	H. B. Heaton	-	206 300	16	N	N E	10	NI	5,479 5,491	-	-	-	-	-	180	-	L.
10cdd-1 12ddd-1	J. Pace West Enoch Irrigation Co.	36	499 250	6 12½	T	E	7½ 15	I,0	5,493 5,526	3-20	-20.8	-	-	58	200 328	293, 337, 434	
12ddd-2 13ada-1	C. S. Smith West Enoch Irrigation Co.	43 48	238 279	12 12	T	E	10 15	I	5,526 5,536	-	-	-	-	-	324 518	58, 148	
13cac-3 13dda-1 13ddb-2	N. Bulloch East Union Irrigation Co. do	45	206 263	8 14 12½	T	E	5 30 40	I	5,514 5,549 5,542	-	-	-	-	57	419 783	- 1	c.
13ddb-3 14aac-1	do Grimshaw Bros.	30	166	14	T	E	40 15	I	5,546 5,495	-	-	-	-	-	472 243	end .	
14bac-1 14ddd-3	H. Nelson D. Murie	32	339 158	- 8	N	N E	5	N	5,499	-	-	-	-	-	-	-	L.
16acd-1	D. and F. Bauer C. Bauer	34	268	12	T	E	15	I	5,502	-	-	~	-	56	425	120, 237, 256	
21cbd-1 21ccd-1	J. Brown G. Perry	-	200 176 172	16 14 14	T	EEE	7½ 15 10	I,O	5,507 5,533 5,540	3-20	-32.2	-	-	56	125	on on	Dd 6.4 ft.
21dbd-1 21dbd-2	D. and F. Bauer do	-	228 232	14 12	N	NE	15	0	5,533 5,534	3-27 3-20	-47.2 -48.7	10-29 10-10	-49.8 -60.9	53	410	-	L, H. Dd 20.6 ft
21dcc-2 27aac-1	J. Brown F. Gardner	61	252 114	12 12	T	E	15 15	I I,0	5,540 5,556	3-20	-66.3	10-10	-73.2	55	575 335	-	Dd 15.3 ft.
27aca-1 27acd-1	Walker Well Bauer Well	34	108 114	12 12	T	E	15 20	I	5,549 5,555	-	-	-	-	-	418 616	34	20.3 20.
27bab-2 27bbc-1	G. Hunter Munford Well	34	204	14	T	E	20	I I,0	5,541	3-20	-61.6	10-25	-67.8	-	335	103, 133, 157 42, 66	Dd 7.1 ft.
27bdb-1 27cdc-1	G. Hunter L. F. Luke	61	156 240	14	T	E	15 25	I	5,550 5,572	-	-	-	-	-	490 675		Da 7.1 20.
27cdd-1 27dbb-1	Bulldog Well Halterman and Luke	34 57	147 228	12 14	T	E	20	I	5,574	-	-	-	-	-	549 598		
28aac-1 28dab-1	Perry Bros. R. Melling	36 35	93 162	12 12	T	E	10 10	I	5,549 5,556	-	-	-	-	-	193	55, 75 140	
29adc-1 29add-1	H. L. Jones K. L. Jones	62	432 110	14	T	E	30 25	I	5,545	-	-	-	-	-	800 702	:	
29dbd-1 31acd-1	A. Williams K. Jensen	30	91	12	T	E	15	0	5,550	3-20	-46.7	10-10	-62.1	-	400		L.
31acd-2 32abd-2	J. Bryant	51 45	472 256	14	T	E	15	I	5,536 5,553	-	-	-	-	55	625 653	:	
32aca-1 32acd-2	G. Sherratt Gower Well	36	223 168	12	T	E	20 20	I	5,553	-	-	-	-	52	598 590	- :	
	E. Corry J. H. Beal	40 50	200	16 14	T	E	20 25	I	5,563 5,550	-	-	-	-	-	563 650	59 60	
32ccd-2 32daa-1 33aac-1	Corry and Palmer T. Highee Cottonwood Well	61 45 30	253 258 138	16 16 16	T	E	20 20 30	I I,0	5,552 5,563 5,579	3-29	-62.4 -89.8	10-25	-98.5	53	612 702	135, 162, 202	CHRA
33abd-1	Cedar Stake, Latter-Day	56	217	14	T	E	20	I,0	5,579	-	-07.0	10-25	-90.5	-	378	85	C, H, P, Dd 14.4 ft.
	Saints Church																

Table 1.--Records of selected wells and springs in the Beaver, Escalante, Cedar City, and Parowan Valleys - Continued

	Table 1 Records of select	ed w	relis	and .	spri	igs i	in the	Beav	er, Esc					rowan	Valley	s - Continued	*
Well		ed (19)	f well t)	(inches)	of lift	power H	ower of mover	water	de of ace datum et)	aft 19	er leve er pum 062, abo ow (-) datum	ping se	eason, or or	ure (°F)	1d m)	water-bearing srs (feet)	available lata
number	Owner or user	Year drilled	Depth of (feet)	Diameter (inc	Method	Type of p	Horsepower prime move	Use of	Altitude o land-surface (feet)	Date	Water level	Date	Water level	Temperature	Yield (gpm)	Depth to wat aquifers	Other ava
					Ce	dar	City	Valle	y - Con	tinue	1						
(C-35-12) 18ddd-1 34dcd-1 34dcd-2 36daa-1	Union Pacific Railroad S. and L. Stucki do Foster Bros.	24 - 59 37	282 108 125 400	14 12 14 12	N N T	N N E	- 15 7½	0 N I,0 I,0	5,385 5,485 5,481 5,520	3-28	-13.2 -22.5	10- 2	-15.3 -25.5	- 54 -	- 600 350	22 -	L. C, L.
(C-36-11) 5abd-1 5baa-1 5bdd-1 5cab-1 5cac-1	F. Perry do S. Ashdown K. Smith do	53 37 35 34 44	166 132 144 230 220	14 12 12 13 14	TTTT	EEEE	20 15 15 20 20	I	5,566 5,558 5,557 5,550 5,549		-	-		52	- 450 675 675	75	
5dcd-1 8bba-1 8bda-1 8cab-1 8cba-1	L. Bulloch S. and L. Stucki J. Williams Higbee, Jones, and Smith R. Leigh	39 56 34 61	150 158 190 200	14 12 14 12½ 14	TTTT	E D E	15 15 - 15 25	IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	5,561 5,563 5,543 5,545 5,544		-	-			675 630 800 175 755	50, 118, 149 28	
8cbb-2 18ada-1 18bdc-1 31bca-1	L. Jones College of Southern Utah do K. Middleton	- 29 58 -	450 230 457	14 12 14 16	TTT	EEE	25 5 40 60	I I,0 I I	5,538 5,531 5,510 5,620	3-20	-58.3 -	-		44 57 56	585 275 675 725	:	c. c.
(C-36-12) 1aaa-3 12dba-1 20acc-1 20ddc-1 25bdd-1	W. Wood College of Southern Utah L. Jones do J. Thorley	46 25 - 56	274 600 - 300	14 12 16 2 14	TTNT	E D N E	15 50	I I,0 I 0 I,0	5,517 5,511 5,480 5,476 5,545	3-20 - 3-20 3-20	-	10-25	-42.6 -13.7	- 56 59 -	652 450 563 - 1,200	- - - - 96	C, L. C. H.
32dbb-1 32dcb-1 33dbc-1 36daa-1	A. Spillsbury do do R. and K. Middleton		308	16 16 2 -	T T N	D E - N	40	I N N	5,463 5,463 - 5,605	-	-	-	-	58 55 53	180 680 -	-	C. L.
(C-37-12) 5abc-1 9acc-1 11aab-1 11add-1 14abc-1	M. Vandenburghe J. Watson G. Vandenburghe A. L. Graff	59 53 - 50	186 365 - 264	14 14 14 14 14	TTTT	D E D E	40 50 - 20	I I,0 I	5,539 5,478 5,490 5,522 5,488	3-20	-33.1	10-10	-40.0	- 70 - 64	1,151 1,000 - 925 600	55, 100, 113 25	c.
14cdb-1- 14dbd-1 23aca-1 23acb-1 23bbd-1	do do J. S. Prestwich do do	- - 40 -	276 300	14 14 16 16 6	T T T Cy	EEEW	25 - 30 40 -	III	5,492 5,498 5,525 5,511 5,495	-	1 1 1 1	-	-	- - 57 54	250 - - -	96	L. C. C.
27dad-1 34aba-1 34abb-1	L. Heywood J. S. Prestwich Kanarraville Irrigation Co.	53 - 34	216 - 190	14 14 12	T	D E E	30 20	I I,0	5,510 5,525 5,507	3-20	-54.3	10-17	-58.0	53	1,050 664	64, 96, 136	C, H, L, P, Dd 22.0 ft.
(C-38-12) 19aaa-1 19aca-1	E. J. Graff	48 46	212 220	14	T	E	40	I	-	-	-	-	-	56	-	-	c.
(0.00.0)				_			Par	rowan	Valley								
(C-32-8) lada-1 13bca-2 14adc-1 22bbb-1 26cda-2	O. C. Snow W. Limb do E. J. Graff W. Limb	- 44 - 51 61	160 - 324 200	6 12 14 14 14	Cy T T	W D D D D	1111	s,0 I,0 N N	5,747	4-4	-50.0 -5.3 -	10-16	-50.8 - -	- 60 58	-	52, 81, 146 - 178, 250, 296	н.
35bcb-1	S. Tucker	36	250	3	F	-	-	5,0	5,768	4- 4	+6.4	10-16	+6.1	51	-	60	C.
(C-33-8) 11bac-1 19ddd-6 20bcc-1 21dcc-1 21ddd-1	Beaver Livestock Co. H. Martin S. Bringhurst T. Abbott S. Barton	45 50 - 50 51	310 204 - 300 250	16 14 - 12 12	T F F,T T	D - D D D		IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	5,734	-	-			- - 52	- - - - 850	84, 170, 264 33, 102, 190 - 188, 233, 296 114, 140	c.
28cda-1 31bcc-1 31ccc-2	F. Williamson H. M. Adams C. Burton	51 51 -	288 302	14 12 14	T	D E E	20 25	I,0 I	-	4- 4	-76.5 -	-	-	56 - 48	770 508 698	123, 220, 262	c.
	W. Eyre H. Adams A. H. Orton S. Bringhurst W. M. Eyre	55 16 - - 47	311 270 - - 292	12 2 12 14 12	TTTT	D N E E	7½ 10 10	I S,0 I I,0 I	5,711 5,720 - 5,747 5,724	- 4- 4 - 4- 4	+1.6	10-15	-6.9 -	58 50 - -	- - 417 200	233, 262, 284	с.

Table 1.--Records of selected wells and springs in the Beaver, Escalante, Cedar City, and Parowan Valleys - Continued

		^		11	t t	Pu	mp		tum	aft	r level	ing se	ason,	E)		aring	Q
Well number	Owner or user	Year drilled (19	Depth of well (feet)	Diameter of well (inches)	Method of lift	Type of power	Horsepower of prime mover	Use of water	Altitude of land-surface dat (feet)	Date	62, abo w (-) 1 datum	and-su	Water level op n	Temperature (°F)	Yield (gpm)	Depth to water-bearing aquifers (feet)	Other available data
						Parc	owan V	alley	- Cont	inued	M		3			R	
C-33-9)																	4
26ddd-4 32ccc-2 32cdd-4 32ddd-1 33aad-1	M. E. Trimmer A. Wilcox E. Bensen C. L. Robinson J. P. Bayles		740	14 12 12 12 12	TTTTT	EEEE	15 7½ 10 15 20	I	5,743 5,703 5,707 5,714	1 1 1 1 1		-	-	55	319	-	G.
33abd-1 34aad-1 34bad-1 34cbd-1 34daa-3	A. B. Evans G. Wood D. Evans D. Robinson R. Dalton	45	317 472 489 127	14 12 12 14 8	F,T T T	EEE	20 10 15 30 15	I I I,0 I	5,706 5,735 5,726 5,737	- 4- 4	-28.3	- - 10-15	-54.6	58 - 54 -	479 - - 740	:	C, L.
34dbd-1	B. Munford	-	-	12	T	E	7½	I	5,753	-		-	-	-	-	-	
34dbd-4 34dcd-2 34ddd-2 35aad-4	do C. L. Robinson R. Dalton H. Dalton	57	291 499 500 430	12 14 14 12	T T Ts	E E E	10 30 30 25	I,0 I	5,753 5,762 - 5,753	3-22	-34.1	-	-	54	600 750 724	32, 60	С, Н.
35acd-2 35bac-2	Day Farms C. Orton	-	440	14	T	E	20 15	I I,0	5,766	3-22	-21.0	-	-	55	630 566	-	C. P.
35bad-2 35ddd-2 36bbc-1 36dcd-1	R. Orton Day Farms H. Dalton H. L. Adams	36 - 25	280 560 499	14 12 14 60,	TTT	EEE	15 30 - 15	I I,0 I	5,792 5,754 5,797	3-22	-66.0	10-15	-80.2		524 417 -	-,	L.
C-34-8)	C Politone		420	4 2	N	N		0	5,802	3- 5	-30 1	10-15	-30.7		_	_	L, H.
5bca-1 6bdd-1 31ddb-1	G. Robinson J. S. Evans Parowan City	53	300	16	T	E	20 15	I,0	-	4- 4	-80.3		-	56 49	400		P.
C-34-9)		1															
laac-1 3bcd-1	H. L. Adams L. Halterman	26	560	16	T	E	40 25	I	5,763	-	-	-	-	54	730	-	C, L.
3cba-4 3cdd-2	do Parowan Stake, Latter-Day Saints Church	62	355	12 16	T	E	25 15	I	5,798	-	-	-	-	-	175	=	
5bda-2 5dad-1	H. E. Bayles Robinson Bros.	48	640	14	T	E	20	I	5,707 5,727	-	-	-	-	-	855	1-	
7ccc-2 8dad-2	Gurr Farms L. Stubbs	54	275	16 14	T	E	40 15 20	I,O	5,754	4- 4	-33.1	-	- 1	53	940 396 451	-	
9aad-2 9baa-4	Parowan Stake, Latter-Day Saints Church H. Dalton	49	340	14	T	E	20	I	5,759	_	_	-	-	-	501	-	
9bca-4 9bcc-1	Gurr Farms Pickett Bros.	44	137	12	T	E	15 25	I	-	-	-	-	-	-	389 462	-	
9bdd-2 9dbc-1	do Parowan Chapter, Future	54 50	318 153	12 16	T	E	25 15	I	5,787	-	-	-	-	-	543	-	
10ddd-1	Farmers of America O. Evans	53	300		T	E	50	I	-	- 4- 4	-113.8	-	-	50	1,042	120, 193	
11bcc-1 16cdd-2 16cdd-3	C. Lister Holyoak Bros. do	51	353	16 14 14	J	E	50 - 25	I,0 S I,0	5,807	3-22	-77.1	-	-	52 52	1,042	78, 255, 309	C.
18cdc-1	G. Bayles	-	-	14	T	E	30	I	-	-	-// 130	-	-	-	916	-	
18dba-1 18dcb-1	J. Farrow do	58 62		14	T	E	10	I	-	-	-	-	-	-	-	-	15
(C-34-10) 13cbd-1	R. Lyman	-	-	16	T	E	15	1,0	5,742	3-22		10-12	-57.2	54	488	-	С, Р.
23ada-1 24aac-1	L. Farrow	61 46		14	T	E	20 15 15	I,O	-	3-22	-69.2	10-12	-73.7	55	983 334 357		H. H.
24abc-1 24bbd-1	E. Bunn C. Evans	61			T	E	30	I	-	-	-	-	-	-	942	80	
24cab-1 24cbc-1 24cbc-2	do J. Farrow do	39			TTT	EE	40 - 20	I,O	-	3-22	-105.6	-	-		1,175	-	

Table 2. -- Pumping levels and discharges of selected irrigation wells in the Escalante, Cedar City

$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Table :	2Pumping levels and di	scharges of selected irri	gation wells in the Esca	lante, Cedar City, and I	Parowan Valleys
	Pumping level1/ (feet) Discharge (Spm)	Date	Date Pumping level (feet) Discharge (gpm)	Date Pumping level (feet) Discharge (gpm)	Date Pumping level (feet) Discharge (gpm)	Date Pumping level (feet) Discharge (gpm)
7 hg matter 7 hg m			Escalante Valley,	Milford district		
C-35-113 dec-2 C-35-15 9ad-1 C-	7½ hp motor 5- 4-53 24.8 570 7-14-53 28.5 505 8-20-53 29.9 485 5-17-54 30.8 475 7-19-54 31.5 447 9-22-54 32.2 441 6-25-57 34.7 425 7-30-57 36.9 350 5-27-58 33.7 433 7-24-58 36.4 416 8-27-58 38.1 402 9-17-58 37.6 411 6-11-59 36.5 416 6-11-59 37.9 398 5- 5-60 33.3 435 7-8-60 33.3 435 7-8-60 34.5 373 5-25-61 36.9 398 8-11-61 42.2 375	7½ hp motor 5-7-53 34.9 445 6-16-53 37.0 330 7-15-53 37.5 225 8-31-53 37.0 270 9-15-54 52.0 3682/ 7-7-55 - 320 9-2-55 56.6 - 5-8-56 53.8 314 7-11-56 60.5 303 9-6-56 64.3 257 7-31-57 55.0 283 7-24-58 61.2 262 9-17-58 59.4 296 5-2-59 51.5 - 7-6-59 59.6 254 9-3-59 62.0 230 5-5-60 52.4 319 7-8-60 61.2 27 9-6-60 63.2 197 7-8-60 61.5 227 9-6-60 63.2 197 5-25-61 55.9 150	20 hp motor 5- 8-53 48.0 770 7-17-53 63.7 515 9- 2-53 62.1 560 5-24-54 58.5 535 5-26-55 69.0 - 8- 4-55 73.0 530 5- 8-56 71.0 572 7-11-56 75.1 557 7-6-56 74.7 453 6-28-57 73.0 515 9- 3-57 78.2 397 5-20-58 68.8 556 7-24-58 74.6 - 8-13-58 - 492 5- 2-59 63.9 569 8- 6-59 75.0 418 5- 5-60 66.6 500 7- 8-60 77.5 364 9- 6-60 77.5 364 9- 6-60 77.5 302/ 5-18-62 85.7 470	40 hp motor 6-11-53 55.3 1,250 7-22-53 55.9 1,230 9- 2-53 57.0 1,215 9- 2-53 57.0 1,215 9- 16-54 57.3 1,210 9-16-54 57.4 1,210 9-16-56 67.0 1,4002/ 7-12-56 67.3 1,390 9- 6-56 69.5 1,410 5- 3-57 76.7 1,377 6-27-57 70.0 1,345 9- 3-57 72.6 1,300 5-20-58 65.2 1,205 6-24-58 67.0 1,180 5-2-59 63.4 -7 7-6-59 66.7 1,100 9- 3-59 72.8 1,075 5-5-60 64.4 1,110 8- 8-60 67.2 1,115 8-10-61 76.9 1,095 5-18-62 65.9 917		
23 hp motor 7-10-53 A3, 31, 220 7-10-56 A5, 51 A5			Escalante Valley, Bery	71-Enterprise district		
C-35-11)33aac-1	25 hp motor 7-10-53 43.3 1,220 5-13-54 47.2 1,100 7-22-54 97.2 1,100 7-10-56 49.5 814 8-16-56 53.8 784 5-9-57 50.3 775 6-26-57 50.0 636 6-25-58 42.9 620 6-25-58 42.6 585 5-15-59 40.3 550 5-30-58 42.6 655 5-15-59 40.3 550 6-25-60 50.8 6354/ 6-25-60 50.8 6354/ 6-25-60 50.8 6354/ 6-6-61 51.5 748 4-30-62 52.5 888	20 hp motor 7-8-53 33.5 710 8-21-53 35.8 660 5-6-54 36.4 673 8-30-54 41.8 760 8-10-55 46.1 677 5-15-56 41.3 715 7-10-56 43.9 642 9-14-56 44.6 614 5-13-57 41.2 711 6-30-57 42.4 657 9-6-57 42.4 557 7-7-58 44.4 557 7-7-58 44.4 557 9-8-59 51.1 8405/ 5-13-60 50.2 850 6-25-60 51.5 803 6-7-61 53.8 728 9-7-62 56.6 635	30 hp motor 6-22-53 58.7 - 8-17-53 60.4 1,240 5-11-54 57.5 1,310 7-22-54 61.7 1,170 8-28-54 62.8 1,185 6-30-55 1,120 6-15-56 63.2 1,130 7-12-56 64.4 1,105 9-4-56 66.6 1,022 7-1-57 65.0 1,030 9-6-57 68.6 1,220 6-11-58 66.9 80.7 7-31-58 66.9 873 8-29-58 70.7 837 5-14-59 63.8 908 7-7-59 70.5 820 9-8-59 71.1 823 5-13-60 68.5 867 8-3-60 80.3 1,1186	100 hp motor 7 - 7 - 53 102 . 0 2 , 640 5 - 11 - 54 104 . 0 2 , 640 5 - 11 - 54 104 . 0 2 , 640 6 - 11 - 54 104 . 0 2 , 240 8 - 11 - 54 104 . 0 2 , 240 8 - 11 - 54 107 . 6 2 , 240 8 - 11 - 54 107 . 6 2 , 240 8 - 11 - 54 11 . 0 2 , 190 8 - 15 - 56 107 . 7 2 , 190 8 - 15 - 56 113 . 3 2 , 160 9 - 12 - 56 113 . 3 2 , 160 9 - 12 - 56 112 . 8 2 , 150 5 - 13 - 57 109 . 4 2 , 105 8 - 9 - 57 116 . 0 2 , 084 9 - 11 - 57 115 . 0 2 , 060 6 - 11 - 58 112 . 0 1 , 945 8 - 29 - 58 114 . 7 1 , 925 5 - 13 - 59 112 . 0 1 , 925 7 - 7 - 59 115 . 9 1 , 803 9 - 2 - 59 117 . 1 1 , 895 5 - 13 - 60 120 . 4 1 , 852 6 - 7 - 61 121 . 0 1 , 825	25 hp motor 6-22-53 114.0 -7-1-53 116.2 520 8-14-53 125.2 575 5-11-54 113.4 605 7-15-54 117.9 520 8-30-54 485 7-1-55 -7-1-55 -7-1-55 -7-1-57 -7-1-	20 hp motor 7-9-53 78.0 710 8-14-53 78.4 630 7-15-54 70.2 585 5-16-56 76.9 548 7-15-56 81.5 327 9-12-56 82.7 407 5-13-77 77.6 -6-29-57 80.2 302 9-5-57 83.4 442 5-30-58 53.8 6378/ 8-29-58 71.4 548 7-7-59 74.6 501 9-2-59 76.5 482 8-3-60 77.8 468 6-7-61 77.3 463 9-7-61 79.0 400 5-23-62 72.5 6558/
30 hp motor		Cedar City Valley			Parowan Valley	
7-31-62 81.5 488	30 hp motor 6-17-53 88.4 805 7-30-53 92.7 785 9-3-53 91.3 785 4-30-54 85.5 830 7-7-54 91.0 802 8-25-54 95.4 790 5-26-55 92.3 - 8-11-55 100.0 750 6-21-56 99.2 661 7-13-56 102.4 661 9-19-56 104.8 640 9-19-56 104.8 640 9-5-57 104.8 660 7-2-58 92.2 710 8-28-58 98.2 692 5-16-59 96.0 675 7-28-59 105.3 630 9-1-59 106.5 630 5-5-60 107.8 614 7-20-60 109.8 609 9-18-60 113.5 595 5-11-61 103.0 612 9-5-61 113.7 569	20 hp motor 8-25-56 83.6 704 7-22-57 - 667 7-2-58 73.5 770 5-15-59 75.5 804 7-10-59 79.1 694 8-14-59 79.7 685 5-26-60 81.3 - 7-18-60 85.4 584 5-12-61 77.2 755 9-5-61 84.7 617		15 hp motor	15 hp motor 6-26-53 96.3 415 8-7-53 94.6 415 6-3-54 91.9 405 7-12-54 100.0 379 5-26-55 97.5 382 7-7-55 - 8-8-55 97.5 370 6-19-56 103.2 410 7-11-56 104.9 365 6-7-57 104.9 365 6-7-57 104.9 365 6-24-57 105.4 328 5-29-58 101.7 385 5-29-58 101.7 385 5-29-58 101.7 385 5-29-58 101.7 385 5-29-58 102.0 326 8-27-58 102.0 326 8-27-58 102.0 326 8-27-58 102.0 368 8-14-59 101.5 337 9-30-59 102.9 43911/ 7-22-60 106.4 433 8-8-61 119.5 4102/ 5-17-62 117.6 -	15 hp motor 6-23-53 62.3 485 9-17-53 55.8 540 5-27-54 61.1 518 7-10-54 60.7 453 8-24-54 64.7 447 5-25-55 65.3 445 8-7-55 68.0 435 5-10-56 66.3 317 6-20-56 70.0 412 7-10-56 70.0 412 7-10-56 70.0 472 7-10-56 70.8 727 5-8-57 63.5 -628-57 63.5 -628-57 69.5 402 9-6-57 72.2 -529-58 68.7 -728-58 68.7 -728-58 68.8 -730-59 72.5 8-31-59 71.5 5-16-59 68.8 -730-59 72.5 8-31-59 71.5 5-6-60 69.9 -721-60 73.1 312 9-16-60 72.5 -511-61 69.5 -511-61 69.5 -511-61 69.5 -8-7-61 72.7 282 5-18-62 76.2 -8/5

L/ Distance between pumping level and land-surf 2/ New pump bowl installed.
3/ 15 hp motor. Added 20 feet of pump column.
4/ 30 hp motor.
5/ New pump installed.
6/ 50 hp motor.

^{//} Added 20 feet of pump column.

8/ Pump bowls adjusted.

9/ New well drilled 35bac-2, 240 ft deep, pump bowls set at 110 ft.

10/ Well deepened to 440 ft and pump bowls set at 90 ft.

Table 3.--Selected drillers' logs of wells in the Beaver, Escalante, Cedar City, and Parowan Valleys

Altitudes are in feet above sea level for land surface at well. Thickness in feet. Depth in feet below land surface.

	Beaver Valley	
Thickness Depth	Thickness Depth	Thickness Depth
C-29-7) 16aaa-1. Log by F. C.	C-29-8)25cac-2. Log by R. L.	C-29-8)25cac-2 - Continued. Clay
and clay	Escalante Valley, Black Rock district	-
C-25-9)17dab-1. Log by A. R. Camble. Clay, yellow	C-25-11)9cad-1	C-26-10)32cad-2. Log by P. Bradshaw. Alt. 4,878 ft. Clay
	Escalante Valley, Milford district	
C-27-10)29dbc-1. Soil	C-27-10)31bbd-1 - Continued. Gravel, boulders 19 271 Clay 5 276 Cravel, boulders 15 291 Clay, gravel 30 321 Gravel, boulders 26 347 Clay, hard 12 359 Gravel, boulders 7 366 Clay 12 378 Boulders 16 394 Clay 7 401 Gravel, boulders 15 416 Clay 8 424 Gravel, boulders 23 478 Clay 16 463 Gravel, boulders 15 478 Gravel, boulders 75 565 565 565 565 565 575 565 575 5	C(C-28-10)7dab-1 - Continued. 7 303 Fine sand, water 16 319 Clay, yellow 18 337 Sand, fine, water 9 346 Clay, yellow 31 377 Sand, fine, water 12 389 Clay, blue 47 436 Sand, hardpan 79 515 Sand, coarse, water 13 528 Shale, blue 17 545 Clay, blue, boulders 12 557 C-28-10)20ddd-1. Log by B and B Drilling Co. Alt. 4,997 ft. 18 18 Sand, water 3 21 San
C-27-10)31bbd-1. 18	Clay	Clay 19 40 Sand 2 42 Clay 59 101 Gravel 4 105 Clay 9 114 Gravel 5 119 Clay 6 125 Clay 4 131 Gravel 3 3 134 Clay 29 163 Gravel 3 134 Clay 29 163 Gravel 3 134 Clay 29 163 Clay 29 163 Clay 3 166 Gravel, sandy and clay 3 166 Clay 8 174 Hardpan 1 175 Sand 3 178 Clay 22 Clay 22 Clay 22 Clay 22 Clay 3 174 Clay 8 174 Clay 8 174 Clay 9 22 Clay 22 Clay 22 Clay 22 Clay 22 Clay 22 Clay 3 178 Clay 22 Clay 3 178 Clay 22 Clay 3 22 Clay 4 24 Clay 4

Table 3.--Selected drillers' logs of wells in the Beaver, Escalante, Cedar City, and Farowan Valleys - Continued Escalante Valley, Milford district - Continued

Thickness Depti	ml d alarman David	
		Thickness Depth
(C-28-10) 20ddd-1 - Continued.	(C-29-10)17ddd-2 - Continued.	(C-29-11)27cad-1 - Continued.
Gravel, sandy	Gravel, sandy, little clay 28 140 Gravel	Clay 27 279
Gravel, sandy	Gravel	Gravel
Clay 84 316	Gravel 6 187	Clay 20 300
Sand, hard 2 318	Clay 16 203	(C-29-12)35ddd-1. Log by
Clay	Gravel 5 208	B and B Drilling Co.
Clay 20 370	Clay	Alt. 5,093 ft.
Hardpan, sandstone 7 377	(C-29-11)11aad-2. Log by	Clay, sandy
Clay, sticky	B and B Drilling Co.	Sand, coarse, and some clay 7 36
Clay, red 16 410	Alt. 5,010 ft.	Gravel, very coarse 1 37
(C-28-11)3dba-1.	Soil	Sand, coarse 7
Lava flow fill 82 82	Sand and gravel	Gravel, fine to coarse, and sand
Boulders	Clay 4 40	Sand, and fine gravel 4 55
Gravel and boulders 25 110	Sand and gravel 5 45	Gravel, very coarse 6 61
Clay and gravel 50 160 Boulders 5 165	Clay	Sand and fine gravel 22 83
Clay and gravel 45 210	Clay	Gravel, medium 5 88 Sand and fine gravel 7 95
Boulders 5 215	Sand and gravel 4 80	Sand, gravel, and clay 5 100
Clay, sandy; coarse 42 257	Clay 9 89	Clay and sand 2 102
Clay and gravel	Sand and gravel	(0.20.11)10)11 1 7 1
Clay, sandy, coarse 35 389	Clay	(C-30-11)12bbb-1. Log by B and B Drilling Co.
Conglomerate, soft 89 478	Clay	Alt. 5,083 ft.
Sand, water	Sand, gravel and boulders 26 176	Topsoil 4 4
Granite, decomposed 16 497 Granite	Clay 5 181	Coarse gravel 6 10
500	Sand and boulders	Sand and fine gravel 5 15
(C-29-10)5dcd-1. Log by	220	Clay, sandy, and gravel 20 35 Clay, sandy, and some gravel . 6 41
B and B Drilling Co.	(C-29-11)27cad-1. Log by	Gravel
Alt. 5,039 ft. Soil 12	P. Bradshaw. Alt. 5,039 ft.	Clay, sandy, and some gravel . 2 53
Soil	Soil	Clay, sandy, and gravel 12 65 Clay, sandy, and some gravel . 10 75
Clay 53 108	Clay	Clay, sandy, and some gravel . 10 75 Clay, sandy, and some fine
Sand, gravel 18 126	Gravel; dry 4 36	gravel 31 106
Clay 8 134 Gravel, boulders 7 141	Gravel 8 44	Gravel 6 112
Gravel, boulders	Clay	(C-30-12)11cbc-1.
Sand, gravel	Clay	Alt. 5,034 ft.
Clay 4 180	Sand	Clay, surface 5 5
Boulders 20 200 Clay 30 230	Gravel 6 79	Gravel, fine 5 10
Sand	Clay	Sand, red
Clay and sand	Clay and gravel 17 106	Clay, white
Gravel 10 285	Gravel 8 114	Clay, white 54 95
Clay	Clay	Clay, red 45 140
Clay 20 330	Gravel 4 131 Clay 19 150	Quicksand
	Gravel 2 152	Clay, red
(C-29-10)17ddd-2. Log by	Clay 20 172	Clay, blue 20 225
B and B Drilling Co. Alt. 5,090 ft.	Gravel	Sand 10 235
Clay, sandy 6 6	Clay	Clay 9 244
Gravel, dry 84 90	Clay	Clay and gravel
Clay 6 96	Gravel 1 211	Clay and gravel
Clay, gravelly 4 100 Gravel 12 112	Clay	Sand
116	Gravel and clay 4 252	Clay and gravel, water 60 401
	Escalante Valley, Lund district	
(C-31-13)1a-1.	(C-32-14)21bad-1 - Continued.	(C-32-14) 21bad-1 - Continued.
Alt. 5,071 ft. Soil and sand 24 24	Clay, blue 65 85	Clay, sandy
Clay	Clay, sandy	Clay, blue
Gravel	Sand, fine, and grave 1	Clay, grey 6 643 Clay, sandy 6 649
Clay	Clay, blue, tough 13 157	Clay, brown and blue 39 688
Gravel	Clay, sandy	Sandstone, soft
Clay 46 116	Clay, brown, hard 12 181 Clay, blue, tough 24 205	Clay, sandy
(C-31-14) 24caa-1.	Clay, sandy 5 210	Clay, brown
Soil and sand	Clay, brown, hard 62 272	Clay, white
Sand and gravel	Clay, blue, tough 23 295	Clay, sandy
Gypsum	Clay, blue	Sand, fine 2 709
Gypsum 6 174	Clay, blue	Gravel, coarse and sand 3 712 Sand 4 716
Gravel 4 178	Clay, sandy 4 370	Sand, coarse and gravel 7 723
Gypsum 6 184 Gravel water 23 207	Clay, brown 4 374	Clay, grey 2 725
Gravel, water 23 207	Clay, blue	Sand, black 3 728
(C-32-13)11dad-1. Log by R. L.	Clay, brown	Sand, coarse and gravel 5 733 Sand
Halterman.	Clay, blue	Sand, coarse and gravel 5 741
Surface clay and soil 5 5 Fine sand 6 11	Clay, sandy 5 443	Clay, brown 5 746
Clay 9 20	Clay, brown	
Sand and gravel	Clay, sandy	(C-33-14)15dbd-1. Alt. 5,118 ft.
Clay	Sand, coarse, water 5 510	Clay and sand
Sand and gravel; little water. 13 70 Clay	Clay, sandy	Clay
Sand and gravel 9 91	Clay, brown	Sand; some water 9 41
Clay 21 112	Clay, sandy	Clay and sand 14 55 Sand, fine and gravel; water . 5 60
Clay, sandy 20 132	Clay, blue	Clay 10 70
(C-32-14)21bad-1.	Clay, sandy 3 573	Sand, fine; some water 30 100
Soil and clay	Clay, brown, tough 18 591 Clay, brown, sticky 21 612	Clay 11
Coarse sand 8 20	Clay, brown, sticky 21 612 Clay, grey 11 623	Clay and sand
	023	140

Table 3.--Selected drillers' logs of wells in the Beaver, Escalante, Cedar City, and Parowan Valleys - Continued

Escalante Valley, Beryl-Enterprise district

	Escalante Valley, Beryl-Enterprise dist	
Thickness Dep		
Cravel; water	Gravel; water 6 Clay 28 Gravel; water 6 Clay 32 Gravel; water 18 Clay 24 Gravel; water	C3-35-16)22add-1 - Continued. Gravel, coarse 14 85
Clay and gravel. 57 1; Gravel; water 5 14 Glay 20 20 Sand; water 3 22 Glay 5 20	5 Gravel; water	256 Clay
Gravel; water. 2 Clay 6 Gravel; water. 3 Clay 22 Gravel; water. 3 Clay 16 Gravel; water. 5	Alt. 5,159 ft. Clay	Clay and sand
Clay 10 Gravel 10 Clay 5 Gravel 22 Clay 2	Clay and gravel	144 146 146 148 148 149 149 149 149 149 149 149 149 149 149
Clay 2 Gravel 20 Clay 6 Gravel 21 Clay 10	(C-35-16)17bad-1.	Surface, white putty 3 47 Clay, red
Gravel and sand	Gravel, coarse 9 Clay	73 103 103 104 117 118 119 119 120 120 120 120 120 120 120 120 120 120
	Cedar City Valley	
Clay, pink and brown	C-35-11)9abd-1 - Continued. Clay	Colay Continued Colay Colay
(C-33-11)30ddd-l. Alt. 5,352 ft. Sand and clay, caving	(C-35-11)14bac-1. Alt. 5,499 ft. Sand and clay.	Clay 22 306 Rock 1 307 79 Sand 2 309 86 Clay 1 310 128 Sand, water 3 313 130 Sand and clay 13 326 132 Gravel and boulders 6 332 142 Clay 2 334 146 Sand 5 339
Sand and clay, fine	Clay	149 149 160 (C-35-11)21dbd-1. 162 Alt. 5,533 ft. 179 Alternating layers of quick- 185 sand and soil, some sand. 70 70 198 Gravel, coarse, water 4 74 204 Clay, red, heavy 26 100 Cravel, coarse and medium, 213 water 5 105

Table 3.--Selected drillers' logs of wells in the Beaver, Escalante, Cedar City, and Parowan Valleys - Continued

Cedar City Valley - Continued

	Thickness	Depth	Thick	ness	Depth	Thickness	Depth
(C-35-11)21dbd-1 - Continued.			(C-36-12)12dba-1 - Continued.			(C-36-12)12dba-1 - Continued.	
Clay, heavy red Gravel, fine to coarse		150 173		6 7	120	Sand and cobble rock 4	565
Clay, brownish red		183		3	130	Clay 9 Sand, fine	574 585
Gravel, medium to coarse;	2	105	Sand, fine	5	135	Clay 6	591
water		185		4 2	139	Sand and gravel 9	600
yellowish	. 20	205	Clay	3	144		
Gravel; good water Clay, yellow and blue		210 225		8	152	(C-36-12)36daa-1. Log by	
Gravel		228		8 3	170	H. Stonehill. Alt. 5,605 ft. Soil 24	24
			Clay	2	175	Gravel; dry 2	26
(C-35-11)31acd-1. Alt. 5,534 ft.				3 3	178 181	Gravel and clay	65 108
No record	. 78	78		6	187	Clay; some water 43 Gravel; some water 5	113
Clay and sand	. 3	81 87	Clay	9 5	206	Clay 17	130
Sand and clay	. 81	168		3	214	Gravel, traces of clay, some water 20	150
Gravel and sand		175		4	218	Clay 40	190
Gravel		200		3	221	Gravel 6 Clay 8	196 204
Clay		222	Clay 16	6	240	Gravel 2	206
Gravel		227 242		2	242	Clay, sticky	218
Gravel and sand		248		8	260	Gravel, some clay; good water. 17 Clay, yellow, hard 23	235 258
(0.05.10)101111			Clay	5	265	Gravel and sand, poor water 24	282
(C-35-12)18ddd-1. Alt. 5,385 ft.			Sand, fine		268	Clay 26	308
Surface soil		22	Sand and gravel		281		
Gravel, water		24 26	Clay		285	(C-37-12)23aca-1. Log by	
Clay, red	. 45	71	Sand, fine		288	P. Bradshaw. Alt. 5,525 ft. Clay, sandy 32	32
Sandstone	. 17	88	Sand, gravel, cobble rock 31	1	342	Gravel and rocks 8	40
Conglomerate		157 280	Sand, gravel, cobble rock		345	Clay 8	48
Rock, hard		282	Clay		374	Clay and gravel	60 83
(C-35-12)34ded-1.			Sand, fine		378	Gravel; water 3	86
Alt. 5,485 ft.			Clay		381	Sand and clay	136 156
Sand and clay		14	Clay		388	Sand and clay 19	175
Clay		48 53	Sand, fine		391	Grave1 2	177
Sand and clay		57	Clay	7	397	Clay and gravel	183 194
Clay		60	Clay		407	Clay 2	196
Boulders	. 24	63 87	Sand, gravel, cobble rock 24 Sand, fine		431	Tight gravel	206 230
Clay	. 6	93	Cobble rock		445	Clay, sandy	256
Gravel	. 4	97 100	Clay		475	Clay 11	267
Gravel, coarse		108	Sand, gravel, cobble rock 21 Sand, fine 5		496	Clay and gravel 9	276
			Gravel 4	4	505		
C-36-12)12dba-1. Log by S. A Halterman. Alt. 5,511 ft.	١.		Clay		508 522	(C 27 12) 2/-bb 1	
Sand and clay	. 7	7	Clay		525	(C-37-12)34abb-1. Alt. 5,507 ft.	
Sand, fine		9 27	Gravel	2	527	Soil 18	1.8
Sand, fine, surface water		30	Clay		529	Sand and clay	48 52
Clay	. 24	54	Clay	7	537	Clay	64
Sand, fine		59 89	Sand, fine	7	542	Gravel, water 26	90
Sand, fine	. 10	99	Gravel	7	556	Clay 6 Gravel, water 58	96 154
Clay		110	Clay		559	Clay 2	156
Sand, coarse	. 4	114	Sand, fine 2	-	561	Gravel, coarse, water 34	190
			Parowan Valley			-	
C-32-8)26cda-2. Log by Floyd			(C-33-9)34cbd-1 - Continued.		206	(C-33-9)36dcd-1.	
Clay	, 16	16	Clay		206	Alt. 5,797 ft. No record 76	76
Gravel; dry	. 10	26	Clay 12		230	Clay 9	85
Clay	. 4	30 41	Sand and gravel		237	Sand and gravel 23	108
Gravel, fine	. 2	43	Sand and gravel 19		281	Clay 20 Sand and gravel 3	128 131
Sand and clay		51	Clay 5	5	305	Clay 23	154
Gravel		55 66	Sand and gravel 6 Clay		311	Sand and gravel 8	162
Gravel	. 24	90	Sand and gravel		328	Clay	174 183
Sand and clay		124 134	Clay 6		334	Clay 5	188
Gravel		142	Sand and clay		344	Sand and gravel	190 196
Sand and clay	. 10	152	Sand, fine		365	Sand and gravel 4	200
Clay		160 168	Sand and clay 5		370	Clay 6	206
Clay		200	Clay		374	Sand and grave1 8 Clay 12	214 226
			Clay 28		408	Sand and gravel 4	230
C-33-9)34cbd-1.			Sand, fine		411	Clay 25	255
			Clay		415	Sand, fine 4 Sand and gravel 3	259 262
Alt. 5,737 ft.		82	Sand, fine 2		418	Clay	269
No record						020)	
Alt. 5,737 ft. No record	. 7	89	Sand and gravel 6		424	Sand and gravel 6	275
No record	. 7 . 28 . 8	89 117 125	Sand and gravel 6 Clay			Sand and gravel 6 Clay 27	
No record	. 7 . 28 . 8 . 2	89 117 125 127	Sand and gravel		424 427 454 461	Sand and gravel 6 Clay	275 302 306 318
No record	. 7 . 28 . 8 . 2	89 117 125	Sand and gravel 6 Clay		424 427 454	Sand and gravel 6 Clay	275 302 306

Table 3.--Selected drillers' logs of wells in the Beaver, Escalante, Cedar City, and Parowan Valleys - Continued

Parowan Valley - Continued

Thickness Depth	Thickness Depth	Thickness Depth
(C-33-9)36dcd-1 - Continued.	(C-34-8)5bca-1 - Continued.	(C-34-9)3bcd-1 - Continued.
Clay 4 351	Clay 6 218	Clay
Sand and gravel	Clay and gravel 49 267	Gravel and sand, water 5 259
Clay 8 362	Clay 25 292	Clay 7 266
Sand and gravel 6 368	Clay and gravel	Gravel 2 268
Clay	Clay	Clay 5 273
Sand and gravel 4 375	Clay and gravel 16 366	Gravel and sand 5 278
Clay 5 380	Gravel 2 368	Clay 8 286
Sand and gravel 6 386	Clay	Gravel and sand, water 15 301
Clay 9 395	Grave1 6 385	Clay
Sand and gravel 5 400	Clay and gravel	Gravel and sand, water 4 338
Clay 4 404	Gravel ?	Clay 2 340
Sand and gravel 6 410		Gravel and sand, water 16 356
Clay		Clay 5 361
Sand and gravel 10 423	(C-34-9)3bcd-1. Log by R. L.	Gravel and sand, water , 9 370
Clay	Halterman. Alt. 5,763 ft.	Clay
Sand and gravel 8 470	Clay	Gravel
Clay	Gravel and sand, some clay 12 29	Clay
Sand and gravel	Clay	Gravel and sand, water 5 392
Clay 6 497	Sand	Clay 9 401
	Clay 20 54	Gravel and sand
Sand and grave1	Gravel and sand; water 12 66	Clay
(0.2/ 0) 51 1		Gravel and sand
(C-34-8)5bca-1.		Cadron and Canor V V V V V V W
Alt. 5,802 ft.	Boulders, gravel and sand;	
Clay 30 30	water 24 109	
Clay and gravel 6 36	Clay 2 111	
Clay	Gravel; water	Gravel and sand 4 456
Clay and gravel 14 57	Clay 9 123	Clay 4 460
Gravel 5 62	Gravel and sand; water 15 138	Gravel and sand
Clay 49 111	Clay 25 163	Clay
Gravel 8 119	Gravel and sand, cemented 6 169	Gravel and sand 4 478
Clay and gravel 7 126	Clay	Clay 3 481
Clay 26 152	Gravel and sand 4 176	Gravel and sand, water 15 496
Gravel 2 154	Clay 6 182	Clay 3 499
Clay 4 158	Gravel and sand; water 16 198	Gravel and sand 6 505
Gravel 3 161	Clay 8 206	Hardpan
Clay 42 203	Gravel and sand; water 5 211	Gravel and sand 3 520
Gravel 4 207	Clay 9 220	Clay 37 557
Clay and gravel 5 212	Gravel and sand	Gravel and sand

Table 4.--Chemical analyses of water from selected wells and springs in the Beaver, Escalante, Cedar City, and Parowan Valleys

(Analyses by U.S. Geological Survey)

					-				-												
Well number	Date of collection	Temperature (°F)	Silica (SiO ₂)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium NA (Na)	Potassium + (K)	Bicarbonate (HCO3)	Sulfate d d (SO ₄)	Chloride (C1)	Fluoride (F)	Nitrate (NO ₃)	Boron (B)	Dissolved solids1/	Hardness as	Noncarbonate hardness as CaCO3	Percent sodium	Scdium adsorption ratio (SAR)	Specific conductance (micromhos/cm at 25°C)	Hd
															9					S E	
									Beaver	Valley											
(C-28-7)21daa-1	6-27-62	53	31	0.01	48	6.8		16	134	25	30	0.5	3.7	-	227	148	38	19	0.6	361	7.4
(C-29-7)19bcd-1 21cad <u>3</u> / 21cda-1 21cdb <u>4</u> /	9-11-61 7- 8-61 7- 8-61 7- 8-61	56 56 54 57	50 31 31 32	2/.38 .01 .00 .01	44 38 59 36	7.3 6.3 8.8 7.3	10	2.5	184 142 180 144	60 16 27 15	22 6.0 28 7.5	.4	2.8 7.5 1.9 6.9	0.02	325 194 266 190	140 120 184 120	0 4 36 2	43 15 14 17	1.8 .4 .4	445 283 414 289	7.5 7.3 7.4 7.4
(C-29-8)9bad-1 25cac-2 31add-1	8- 9-62 9-11-61 8-10-60	64 68 53	44 69 49	2/.05 .01	248 32 82	30 5.4 18		63 29 5.3	253 128 397	250 48 89	292 7.0 54	.7	.7 .7 1.8	18	1,050 254 592	745 103 277	538 0 0	16 38 43	1.0 1.2 2.5	1,700 298 886	7.3 7.9 7.8
(C-29-9)36dcc <u>5</u> /	9-15-61	70	69	.01	107	39	8	1 84 1	498	93	75	-	.6	-	713	428	20	30	1.8	1,090	7.9
						Е	scala	ante V	Valley,	Black	Rock dist	rict							1,4		
(C-27-10)6ddb-1	6-27-62	56	22	2/.00	25	15	20	02	250	20	236	1.2	.7	2.0	647	124	0	78	7.9	1,190	8.2
							Esca:	lante	Valley,	Milfo	rd distri	ct									
(C-28-10)7adb-1 17ccc-1 21ccd-1 30bdd-2	12- 2-55 5-18-62 5- 2-59 9- 6-61	78 58 58 58	35 45 53 45	.02 .01 <u>2</u> /.10	160	5.8 117 95 47	202		160 169 146 254	40 777 346 551	16 685 320 228	.6	.5 1.8 9.9 9.9	.32	255 2,310 1,120 1,390	56 1,450 790 895	0 1,310 670 687	69 23 16 19	3.6 2.3 1.1 1.4	390 3,560 1,810 1,920	8.2 7.6 8.1 7.5
(C-28-11)25dcd-1	5-18-62	67	36	.12	71	16	36	4.0	144	121	60	.3	.4	.08	416	244	126	24	1.0	668	7.7
(C-29-10)5cdd-3 18add-2	9- 6-61 5-18-62	56 56	37 33	<u>2</u> /.06	173 51	27 11		47	270 141	165 41	159 38	.2	34	.04	775 264	542 172	321 56	16 17	.9	1,190 434	7.4
(C-29-11)4baa-1 11cdd-2 12ddd-1 28add-2	6-27-62 5-18-62 5- 2-59 5-18-62	58 58	17 38 37 43	<u>2</u> /.01 .06 .01	71	81 25 16 23	39	56 4.5 22 6.2	169 140 130 189	712 74 49 160	372 108 104 195	1.4	3.2 28 4.9 6.0	.09	1,750 457 375 739	635 279 261 422	496 164 154 267	55 23 15 29	6.2 1.0 .6 1.7	2,710 797 644 1,220	7.4 7.2 8.2 7.2

Table 4.--Chemical analyses of water from selected wells and springs in the Beaver, Escalante, Cedar City, and Parowan Valleys - Continued

					7			Par	rts per 1	million						***			4.6	
Well number	Date of collection	Temperature (°F)	Silica (SiO ₂)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na) Potassium X (K)	ite	Sulfate (SO ₄)	Chloride (G1)	Fluoride (F)	Nitrate (NO3)	Boron (B)	Dissolved solids <u>1</u> /	Hardness as CaCO3	Noncarbonate hardness as CaCO ₃	Percent sodium	Sodium adsorption ratio (SAR)	Specific conductance (micromhos/cm at 25°C)	Hď
					I	Escala	nte Valle	y, Milfo	ord dist	rict - C	ontin	ued								
(C-30-9)7acc-1	6-27-62	92	32	2/0.00	111	23	190	230	477	65	3.3	0.5	0.42	1,020	372	183	53	4.3	1,460	7.7
(C-30-10)10baa-1 19abd-1	6- 6-60 9- 6-61	56 70	34 60	2/.03	122 40	26 8.5	32 43	217 147	113 54	124 34	-	13 5.2	-	571 317	412 135	234 14	14 41	.7 1.6	942 438	8.0
(C-30-12) 28 <u>6</u> / (C-30-13) 22ccc-1	10-17-54 6-27-62		112 34	<u>2</u> /.78 4.2	82 89	11 23	370 51 54	384 167	458 107	212 130	6.0	.6	-	1,490 521	250 318	0 181	72	10	2,160 886	7.1
Escalante Valley, Lund district																				
(C-33-13)3caa-1	6-27-62	57	40	.05	184	57	97	195	441	200	.5	3.5	**	1,120	694	534	23	1.6	1,640	7.5
(C-34-13)16ccc-1	8- 9-62	64	30	.12	108	22	32	199	212	31	.2	6.4	-	540	362	199	16	.7	790	7.8
						Esca	lante Val	ley, Ber	ryl-Ente	rprise d	istri	ct								-
(C-35-15)3dcc-2 3ddc-1	5- 1-62 5- 1-62		61 63	2/.05 2/.02		50 56	214 8.0 478 8.4	198 343	736 1,270	428 412	.2	5.3	.49	1,950	1,070	908 814	30 48	2.8	2,750 3,850	7.5
(C-35-16)9add-1	5-23-62	55	52	2/.02	65	7.3	16 3.9	196	23	32	.2	2.7	.03	298	191	30	15	.5	450	7.3
(C-36-15)7dba-1 7dcc-1 9dbc-1	7- 7-59 5- 5-59 4- 6-59	87 65 55	76 81 34	.01		3.4 10 28	267 315 34	91 96 <u>8</u> /170	492 624 134	93 118 125		12 11 114		1,040 1,280 698	146 219 474	71 140 335	80 76 13	9.6 9.2 .7	1,580 1,740 1,190	7.7 7.5 8.5
(0-36-16)5a-9 6c-3 31ccc-1	5-23-62 5-29-59 9- 7-61	57 58 51	40 60 35	2/.02 .00 2/.09	199	14 8.0 10	26 7.0 22 28	250 188 242	92 12 25	208 31 24	.3	20 2.7 7.8	.03	729 281 314	554 164 204	349 10 6	9 23 23	.5	1,220 407 473	7.5 8.2 7.5
(C-36-17) 2d9/ 2d-2	5- 5-59 10-20-61	64	104 46	.00 <u>2</u> /.00	150 49	27 4.6	28 26	238 168	71 16	187 29	-	17 3.3	-	701 257	486 141	291 3	11 29	.5	1,100	7.5
(C-37-17)12bdc-1 14bac-1	8- 3-60 8- 3-60	55 55	59 65	.00	75 69	13 14	29 4.3 33 5.7	278 292	24 23	29 30	.1	23 5.6	.02	393 390	240 227	125 0	20 23	.8	572 567	7.6 7.8
							C	edar Cit	y Valley	7										
(C-33-10)29adc-1	6-27-62		31	.19		21	73	166	70	74	.3	109	-	523	244	108	39	2.0	886	7.5
(C-33-12)11aaa-1 (C-34-11)36cdd-2	8- 5-60	57	38	.46		33	88	210	291	83	.7	1.3	-	746	404	232	32	1.9	1,090	7.5
(C-35-11)13dda-1	5- 4-59	57	53	.01		35	26 5.1	234	79	34	.4	1.8	.11	346 439	303	38	19	.7	522 675	7.9
33aac-1	8- 5-60	53	23	.01	212	91	28 3.7	298	666	20	.1	.5	.08	1,190	904	660	6	.4	1,520	7.5
(C-35-12)34dcd-1 (C-36-11)18ada-1	5-26-59	54	30	.00 <u>2</u> /.05	72	96	53 2.9	183 246	239 779	18	.1	2.9	.16	528 1,430	352	202 800	18	.8	777	7.9
18bdc-1 (C-36-12)12dba-1 20acc-1	2- 3-58 9- 5-61 11- 9-61	56 56 59	28 22 34	2/.09 2/.01	86 76	62 40 17	31 17 25	171 177 162	367 231 36	55 17 100		7.8 2.4	1 1 1	746 508 370	538 380 260	398 235 127	11 9 17	.6	712 624	7.7 7.6 7.4
33dbc-1	5-26-59	53	124	.00	36	7.3	15	146	8.8	17	-	.8		281	120	0	22	.6	286	7.7
(C-37-12)1laab-1 23acb-1 23bbd-1 34abb-1	7-13-59 8-16-60 4-22-59 9- 5-61	57 54	54 16 28 16		51	28 22 243 33	34 33 2.0 463 26	178 162 166 268	137 135 1,010 154	12 18 1,380 13	.0	3.0 1.0 66 15	.14	403 358 3,750 477	234 218 2,180 353	88 85 2,040 133	24 25 32 14	1.0 1.0 4.3	586 538 5,690 689	7.7
(C-38-12)19aaa-1	8- 9-60	56	20		246	88	39 3.2	242	811	26	.1	5.5	.14	1,360	975	777	8	.5	1,680	7.5
,							1	Parowan	Valley											-
(C-32-8) 22bbb-1 35bcb-1	4- 4-59 4- 4-59	58 51	62 7.2	.00	19 12	5.6	27 19	125 48	6.4	15 28	-	.6	-	197 106	71 40	0	46	1.4	257 175	8.1
(C-33-8)21dcc-1 31ccc-2	9- 4-57 9-26-61	52 48	19 28	.05 <u>2</u> /.06	64 59	22 20	20 30	315 250	13 31	14 38		7.1	-	314 334	252 230	0 25	15 22	.6	527 540	7.4
(C-33-9) 24aba-1 32cdd-4 33aad-1 33abd-1	4- 4-62 5- 4-59 8- 5-60 4- 4-59	55 51	4.6 36 32 30	2/.11 .00 .01	10 30 32 27	2.9 18 19 17	58 1.2 13 12 2.2 17	107 10/183 196 11/178	19 17 20 17	41 6.0 8.0 7.0		.1 .7 3.0 1.8	.04	190 211 224 205	38 148 158 139	0 0 0	76 16 14 21	4.1 .5 .4	345 321 346 310	7.9 8.4 8.0 8.4
34cbd-1 34dcd-2 35acd-2	10-16-57 5- 4-59 9-26-61		34 28 26	.01 .00 <u>2</u> /.02	46 51 57	18 27 21	18 13 18	210 281 252	21 19 28	23 9.5 18		4.5 6.3 8.6	1 1 1	268 292 301	190 241 228	18 11 21	17 10 15	.6 .4 .5	430 479 481	8.0 7.8 7.6
(C-34-8)31ddb-1	9-10-57	49	20	.05	72	26	8.5	302	41	10	_	.4	-	327	286	38	6	.2	515	7.4
(C-34-9)3bcd-1 16cdd-2	8- 5-60 10-31-61	54 52	34 31	2/.00	50 63	26 23	10 2.5	274 298	22 21	8.0	.1	6.3	.00	294 314	232 250	7 6	9 12	.3	454 493	7.8
(C-34-10)13cbd-1	9-11-61	54	40	2/.02	46	22	22	244	32	12	-	2.9	-	297	205	5	19	.7	436	7.8

Table 4.--Chemical analyses of water from selected wells and springs in the Beaver, Escalante, Cedar City, and Parowan Valleys - Continued

- 1/ Dissolved solids calculated from determined constituents.
 2/ In solution at time of collection.
 3/ Spring north of Beaver Fish Hatchery. Approximate location.
 4/ Spring east of Beaver Fish Hatchery. Approximate location.
 5/ Spring in bottom of Minersville Reservoir. Approximate location.
 6/ Thermo Hot Springs. Approximate location. Covers several acres.
 7/ Temperature on August 9, 1962, was 167°F.
 8/ Includes equivalent of 9 ppm carbonate (CO₃).
 9/ Mine shaft. Sample taken from water pumped from shaft. Approximately 300 yards south of well 2d-1.
 10/ Includes equivalent of 5 ppm carbonate (CO₃).
 11/ Includes equivalent of 6 ppm carbonate (CO₃).

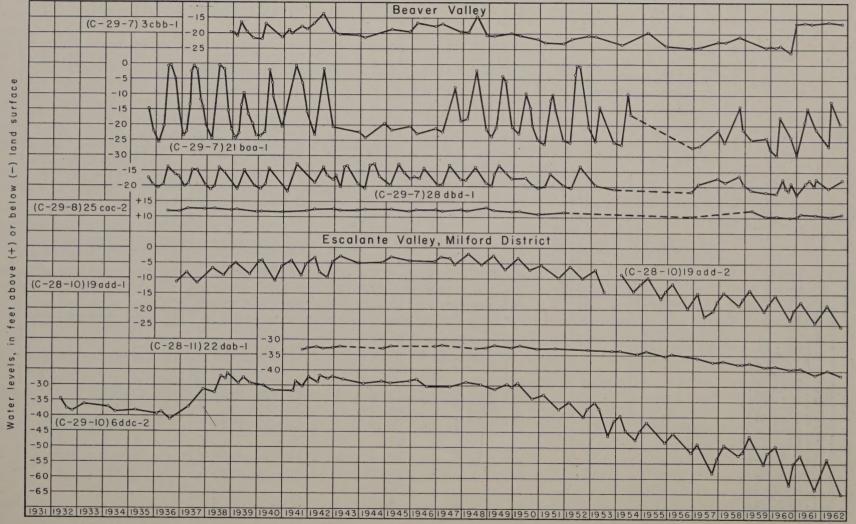


Figure 2. — Hydrographs of 30 selected wells in the Beaver, Escalante, Cedar City, and Parowan Valleys.

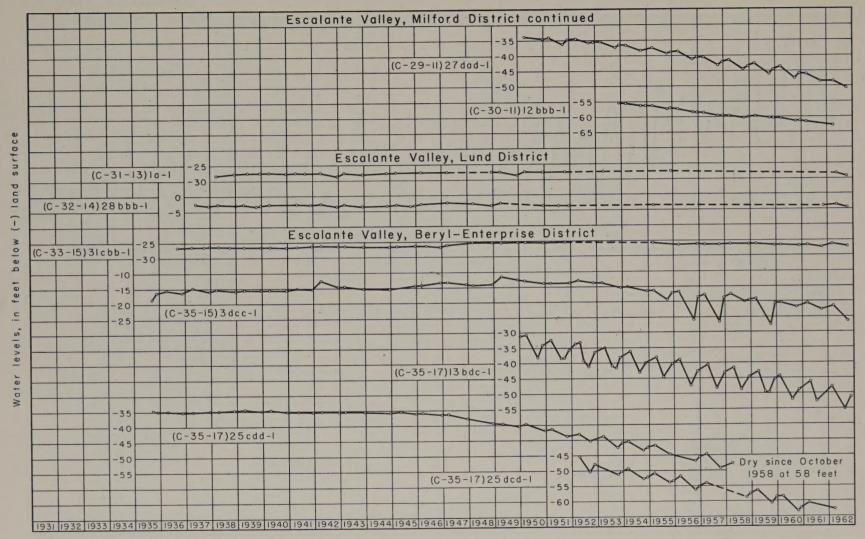


Figure 2. - Continued.

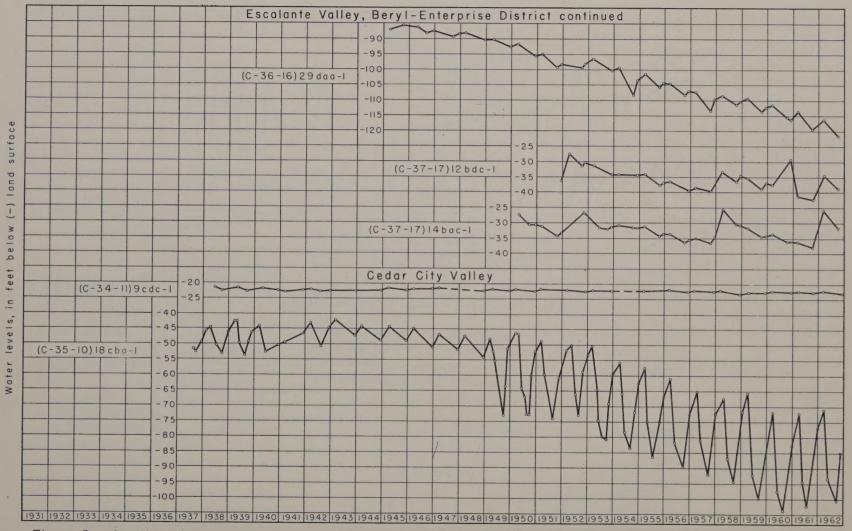


Figure 2. - Continued.



Figure 2. - Continued.

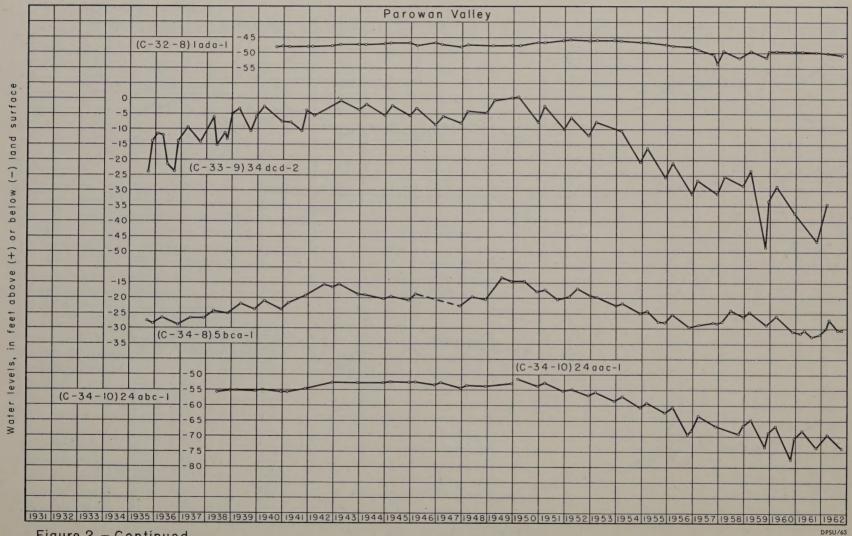
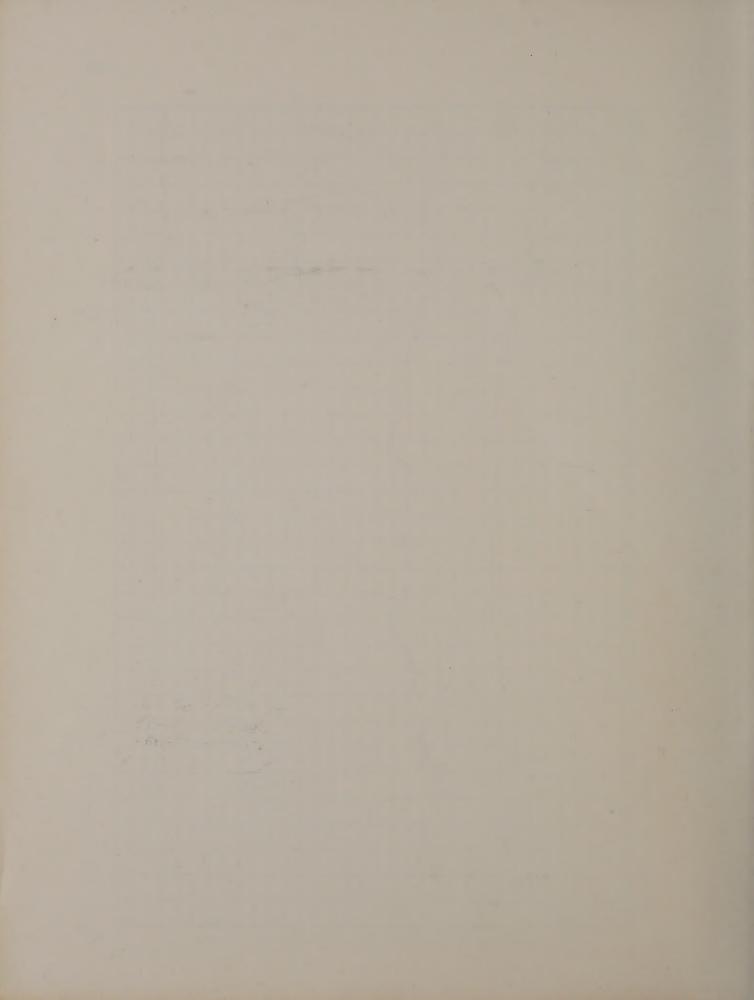


Figure 2. - Continued.





TENT OF THE INTERIOR

URVEY

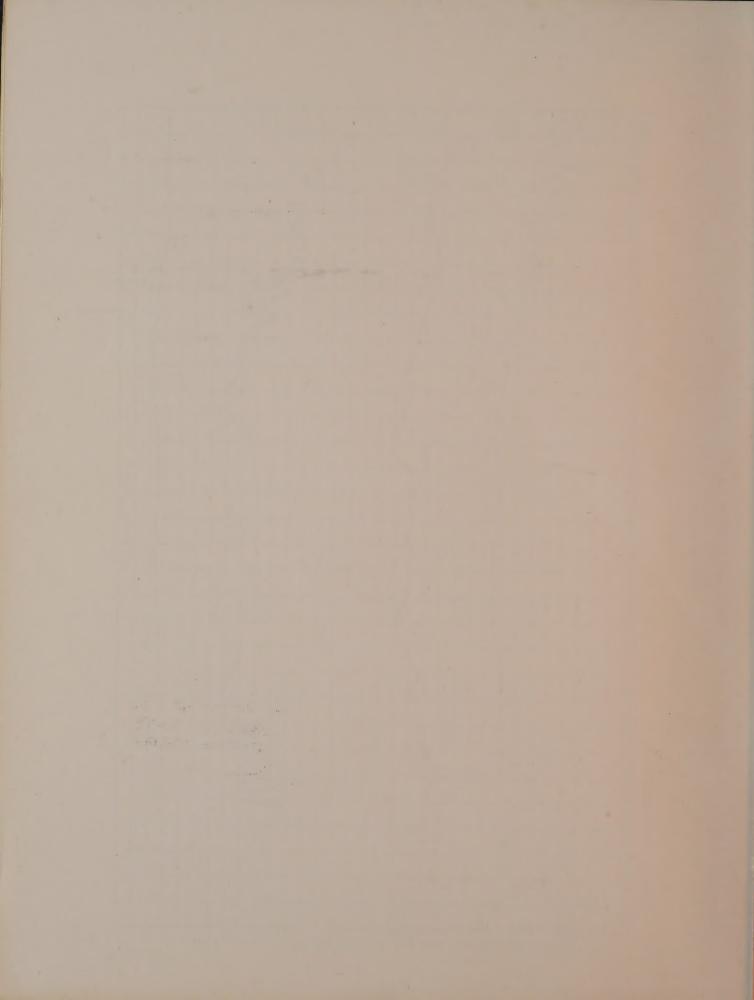
FER

in table 2

ble 4

BLM Library
Denver Federal Center
Bldg. 50, OC-521
P.O. Box 25047
Denver, CO 80225

I map enclised



UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
AND
UTAH STATE ENGINEER

R.12 W. T. 23 S. EXPLANATION T. 25 S. Pumping levels and discharge in table 2 Black Driller's log in table 3 Chemical analysis in table 4 Beaver County Hydrograph in figure 2 Rock A number by a well symbol indicates that more than one well is represented by the symbol Distric Boundary of ground-water districts in Escalante Valley UTAH LOCATION MAP Beaver County Iron County R.17W. CEDAR R.19 W. District Beryl-Enterprise Iron County Washington County Enterprise Reservoirs 0 1 2 3 4 5 MILES

